

Library



REPORT

ON THE



Health of the County Borough of Belfast for the Year 1960

WILLIAM GEORGE SWANN, M.D., B.Sc., D.P.H., D.P.A.

Medical Officer of Health



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Medical Officer of Health

COUNTY BOROUGH OF BELFAST

Health Committee

1960

Chairman:

Councillor SAMUEL HAROLD WALSH

Deputy Chairman:

Councillor JAMES ROBERT CLELLAND McCLURG (Died May, 1961)
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Aldermen:

THOMAS GIBSON HENDERSON

ROBERT GEORGE CALDWELL KINAHAN, E.R.D., J.P.

EDWARD FITZGERALD McENTEE, M.B. (Died Dec., 1960)

CHARLES DALEY

Major WILLIAM DUNCAN GEDDIS, J.P.

Councillors:

JOHN SAMUEL ROLSTON HARCOURT

Miss IRENE MARGARET ELIZABETH McALERY

WILLIAM ATCHESON, J.P.

WILLIAM BOUCHER, J.P.

SAMUEL HAROLD WALSH

Mrs. MARJORIE SINCLAIR

ALBERT ERNEST QUINN

HUGH ROBERT BROWN, M.Com.Sc.

LESLIE STEWART, J.P.

HEALTH DEPARTMENT
STAFF AS AT 31st DECEMBER, 1960

Medical Officer of Health and Port Medical Officer:—
W. G. Swann, M.D., B.Sc., D.P.H., D.Obst. R.C.O.G., D.P.A.
Deputy Medical Officer of Health and Deputy Port Medical Officer:—
J. McA. Taggart, M.B., D.P.H., D.P.A.

HEADQUARTERS:—

Administrative Officer:— S. N. Smith, B.Com.Sc.

Administrative Branch:—

3 Receptionist/Operators.

Accounts and Stores Branch:—

1 Executive Assistant; 2 Clerks Higher Division Grade II; 1 Clerical Officer; 5 Clerical Assistants.

Registration Branch:—

Superintendent Registrar of Births, Deaths and Marriages — J. C. Walker.

1 Deputy Supt. Registrar; 4 Registrars; 2 Deputy Registrars; 3 Copy Typists.

Typing Branch:—

1 Supervisor of Typists; 4 Shorthand Typists; 3 Copy Typists.

ENVIRONMENTAL HEALTH DIVISION:—

Senior Medical Officer—W. J. McLeod, M.D., D.P.H., D.P.A., Ph.C.
Executive Officer—G. H. Davis.

Infectious Diseases Branch:—

Medical Officer—J. A. Gilmore, M.B., D.P.H.; 1 Clerk Higher Division Grade II; 10 Clerical Assistants.

Sanitary Branch:—

Chief Public Health Inspector	—J. Walker
Senior Food Inspector	—W. Jenkins.
Senior Pests and Disinfecting Officer	—W. Robinson
Senior Inspector of Factories and Shops	—P. J. McMahon
Senior Smoke Officer	—C. Ellison.
Divisional Public Health Inspector, South	—W. N. Shields
Divisional Public Health Inspector, West	—F. W. Hill
Divisional Public Health Inspector, East	—T. F. Mills
Divisional Public Health Inspector, North	—J. Thompson

7 Food and Drugs Inspectors; 2 Port Public Health Inspectors; 2 Factory Inspectors; 1 Smoke Inspector; 25 Public Health Inspectors; 4 Pests Officers; 12 Pupil Public Health Inspectors.

1 Clerk Higher Division Grade I; 1 Clerk Higher Division Grade II; 2 Clerks Higher Division Grade III; 3 Clerical Officers; 8 Clerical Assistants; 1 Clerical Attendant; 1 Notice Server.

Meat Inspection Branch:—

City Veterinarian—A. McLean, B.Sc., M.R.C.V.S., D.V.H.

Senior Meat Inspector—G. F. Moore.

5 Meat Inspectors.

MATERNITY AND CHILD HEALTH DIVISION:—

Senior Medical Officer — H. A. Warnock, M.D., B.Sc., D.P.H.

Clinic Medical Officer — K. M. Cathcart, M.B., D.P.H.

9 Part-time Medical Officers.

Superintendent Nursing Officer — Miss M. F. J. Baird, S.R.N., S.C.M., H.V. Cert.

Superintendent of District Nurses — Miss D. Ritchie, S.R.N., S.C.M., H.V. Cert., Q. N.

Supervisor of Midwives — Miss M. A. Hay, S.R.N., R.S.C.N., S.C.M.

Assistant Nursing Officers — Miss E. F. Magill, S.R.N., S.C.M., H.V. Cert.
Mrs. M. E. Duke, S.R.N., S.C.M., H.V. Cert.
Miss J. Stirling, S.R.N., S.C.M., H.V. Cert.

Deputy Supt. Health Visitor — Miss K. M. Smyth, S.R.N., S.C.M., H.V. Cert.

First Assistant Superintendent of District Nurses:—
Vacant.

Second Assistant Superintendent of District Nurses:—
Mrs. A. Beattie, S.R.N., S.C.M., Q.N.

53 Health Visitors; 52 District Nurses; 2 Senior Midwives; 23 Midwives (Salaried); 19 Midwives (Fee-per-case).

Executive Officer—A. Watson, A.C.I.S.

1 Clerk Higher Division Grade II; 3 Clerical Officers; 1 Shorthand Typist; 1 Copy Typist;
15 Clerical Assistants; 7 Clinic Clerks (part-time); 3 Cook-Housekeepers.

SCHOOL HEALTH DIVISION:—

Senior Medical Officer — A. L. Walby, M.B., D.P.H.

Clinic Medical Officers:— A. D. Campbell, M.B., D.P.H.
E. A. M. McMordie, M.B., D.P.H.
P. S. Kerr, M.B., D.P.H.
K. McKee, M.D., D.P.H., D.C.H.

Medical Officers: — A. P. Watson, M.B., D.P.H.
G. K. Moffatt, M.B., D.P.H.
D. B. Keith, M.B., D.P.H.
K. M. Corbett, M.D., B.Sc., D.P.H., D.C.H.
S. G. Gordon, M.B., D.P.H., D.C.H., D.T.M.H.

Chief Dental Officer: — S. R. Sheane, L.D.S.

Clinic Dental Officers: — V. M. G. Rattie, L.D.S.
H. C. Thornberry, L.D.S.
P. J. R. Griffith, M.B., L.D.S.
J. R. Faulkner, L.D.S.

Dental Officers: — W. R. Morrow, L.D.S.
J. B. Hanna, L.D.S.
T. S. Brannigan, L.D.S.
W. J. Hutchinson, L.D.S.
H. M. Gilfillan, L.D.S.

6 Part-time Medical Officers (Anaesthetists)

3 Senior School Nurses; 24 Health Visitors; 1 Speech Therapist (part-time); 2 Physio-therapists; 25 Dental Attendants.

Executive Officer — R. T. Curry.

1 Clerk Higher Division Grade II; 1 Clerical Officer; 3 Shorthand Typists; 1 Copy Typist;
11 Clerical Assistants.

COUNTY BOROUGH OF BELFAST

Summary of Vital Statistics, 1960

Area (Census 1951) (Exclusive of 1,223 acres of tidal water)	..	..	..	..	15,357 acres (24 sq. miles)
Population ..	..	..	..	..	433,900 (estimate of Registrar General for N.I., June, 1960) (males 204,100; females 229,800)
Marriages ..	..	..	..	..	3,704
Marriage Rate ..	..	..	..	..	8.5
Births Registered ..	..	..	..	..	8,736 (4,520 males; 4,216 females)
Birth Rate ..	..	..	..	..	20.1
Birth Rate average for the ten years 1951-1960					19.0
Illegitimate Births ..	..	..	..	..	261 (127 males; 134 females)
Illegitimate Births as a percentage of total Births					3.0
Births (notified) ..	..	..	..	..	11,514
Still Births (included in total births notified)	..				297
Deaths ..	..	..	..	..	4,737 (2,392 males; 2,345 females)
Death Rate ..	..	..	..	..	10.9
Death Rate average for the ten years 1951-1960					10.9
Deaths of infants under one year of age ..				..	243 (140 males; 103 females)
Infant Mortality Rate ..	..	..	..	..	28 deaths per 1,000 live births
Average for the ten years 1951-1960 ..	..	..	..	..	36 deaths per 1,000 live births
Neo-Natal Deaths (under one month) ..				..	173 (103 males; 70 females)
Neo-Natal Death Rate ..	..	..	..	..	20 per 1,000 live births
Average for the ten years 1951-1960 ..	..	..	..	..	22 per 1,000 live births
Maternal Deaths ..	..	..	..	..	3
Death Rate ..	..	..	..	..	0.34 per 1,000 births registered
Deaths from Communicable Diseases listed in Table 9 ..	..	..	..	..	21
Death Rate from these Diseases ..	..	..	..	..	0.05
Deaths from Measles ..	..	..	..	..	Nil
Deaths from Typhoid Fever ..	..	..	..	..	Nil
Deaths from Scarlet Fever ..	..	..	..	..	Nil
Deaths from Whooping Cough ..	..	..	..	..	Nil
Deaths from Diphtheria ..	..	..	..	..	Nil
Deaths from Diarrhoea and Enteritis (under two years of age) ..	..	..	..	..	10
Deaths from Dysentery ..	..	..	..	..	2
Deaths from Influenza ..	..	..	..	..	8
Deaths from Tuberculosis of the Respiratory System ..	..	..	..	..	28
Death Rate from Tuberculosis of the Respiratory System ..	..	..	..	..	0.07
Deaths from Bronchitis ..	..	..	..	..	309
Deaths from Pneumonia ..	..	..	..	..	229

To:

The Right Honourable The Lord Mayor and the Aldermen and Councillors of the Belfast County Borough Council, acting as the Belfast Health Authority and the Belfast Port Sanitary Authority :—

My Lord Mayor, Ladies and Gentlemen,

I have the honour to submit my Annual Report for the year 1960.

Vital Statistics:

The estimated mid-year population has risen by 100 to 433,900. The number of births registered was 8,736, an increase of 371 compared with 1959.

The number of deaths registered was 4,737, a decrease of 84 compared with 1959. Deaths from cancer numbered 793, (9 fewer than in 1959). There were 159 deaths from "cancer of the lung", comprising 134 males (3 fewer than in 1959) and 25 females (5 fewer than in 1959).

The 1959 infantile mortality rate was 28, as compared with a rate of 32.8 for 1959. This rate of 28 is the lowest ever recorded for the City, the previous lowest being 29 in 1956. The regrettable increase of 16 deaths from motor vehicle accidents in 1959 compared with 1958 has been maintained, 3 more deaths having occurred in 1960 as compared with 1959, bringing the total of deaths due to this cause to 44. The number of deaths from tuberculosis (all forms) was 31, including 28 deaths from pulmonary tuberculosis. This is a remarkable decrease from 1959, when the figure was 68 (62 pulmonary). The number of cases of tuberculosis notified was 357, compared with 379 in 1959 and an average for the preceding four years of 471. This is a decrease of 22 notifications and this in spite of an intensive door-to-door mass radiography campaign in several wards of the City in 1960 which led to the finding of new cases.

For the sixth successive year, no cases of Diphtheria were notified. There were no deaths from whooping cough as compared with seven in 1959.

Health Education:—

The Annual Conference in co-operation with the Central Council for Health Education was held in Belfast on 20th May, 1960, the topic being "Mental Illness". Dr. D. Gardiner, Deputy Medical Superintendent of Purdysburn Hospital, read a paper dealing with the modern treatment of mental illness, contemporary attitudes to institutional care and the relationship between unstable environment and mental illness. Miss R. P. O'Hare, B.A., Senior Psychiatric Social Worker, Purdysburn Hospital, spoke on the early recognition of mental disturbance, the attitude of the public towards mental illness and the problems presented by community care of the mentally ill.

The discussion which followed was of particular interest to the Health Visitors of the Department who have received training at Purdysburn Hospital and the Royal Belfast Hospital for Sick Children Child Guidance Clinic, to enable them to participate in the after-care of the mentally ill under the guidance of the Psychiatric Social Workers.

In an attempt to bring before the public the serious problem of accidents in the home, a three-month campaign was conducted during October till December, 1960. The campaign was launched with a four-day Home Safety Exhibition in the Rosemary Street Hall. Features of this exhibition were the projection of coloured slides on home accidents and a continuous film show covering the problem from both serious and humorous angles. This exhibition was a joint effort by the Health Committee the Ministry of Health and Local Government, the Electricity and Gas Departments and Robinson & Cleaver, Ltd. Thanks to the Director of Education, arrangements were made to permit a large number of school children to visit the exhibition in parties conducted by their teachers: over 1,200 attended. Approximately 2,000 people in all attended the exhibition during the four days. During a two-week period 10 shop window displays were organised in the City centre and thanks are due to those traders who so willingly co-operated. The Transport Department displayed over 1,000 home safety posters on their vehicles and 100 poster sites were rented for a period of eleven weeks.

By arrangement with the Royal Belfast Hospital for Sick Children and the Ulster Hospital for Women and Children, all cases of burns and scalds treated at the out-patient departments and all cases of home accidents admitted to the hospitals are notified to this Department. These cases are followed up by Health Visitors who visit the homes concerned to obtain details of the accident, to examine home conditions which might predispose to accidents and to give appropriate advice on accident prevention to parents of young children.

Of 355 cases investigated during 1960, 101 were admitted to hospital. 163 cases were due to burns (66 caused by open fires, 32 by fires on waste ground, 19 by electrical appliances and 16 by fireworks). In addition, four children died as a result of fire in their homes: the father of one of the children died later from burns sustained in rescue attempts. In most of the "open fire" cases, the fires were unguarded or guards had been temporarily removed. In many instances where fireguards are used, they are not approved types and do not give adequate protection. 49 cases were due to accidental poisoning and most of these indicated lack of care on the part of parents in leaving tablets, medicines and dangerous substances within reach of young children. The most deplorable habit of leaving noxious substances lying about in unlabelled containers (usually mineral water bottles) was the cause of 22 of these cases of accidental poisoning. The 16 burns from fireworks occurred at the Hallowe'en period and were attributable to careless handling; in one instance a boy was seriously burned when fireworks in his pocket were ignited by another boy. 133 cases were due to scalds, of which number 130 were caused by hot liquids or cooking fat.

Research Projects and Investigations:—

I have thought it worth while to indicate some of the more interesting research projects and investigations which have been undertaken since I joined the Health Department. Much of this work has been done at the request of, or in collaboration with, the Queen's University of Belfast and other research institutions. My thanks are especially due to the three Senior Medical Officers of the Divisions of the Department and to the medical, dental and nursing staff who have helped to various degrees and ways to make these undertakings successful. The nature of the project is usually an indication of the Division most involved, though in some instances more than one Division has had a part in an investigation.

Heterochromic Iris: in collaboration with Dr. Cheeseman of the Department of Social and Preventive Medicine, an investigation of this matter as a possible indication of the effect of small doses of X-rays on the unborn child. School Health Medical Officers and Health Visitors will be involved in this project for two years in routine school medical inspections. The records of the Maternity and Child Health Division are also being utilised and the Medical Research Council and Prof. Lejeune of the Faculty of Medicine, Paris, are also interested in this project.

The "Eleven-Plus" Examination: A study was made of the possible effects of this examination on the health of candidates and a report was made by Dr. A. L. Walby (Senior Medical Officer, School Health Division) and Dr. McLaughlin (Antrim County Health Committee) to the Advisory Council for Education in Northern Ireland, who have discussed it and passed it to the Ministry of Education.

Urinary Chromatography: urine specimens were collected by Health Visitors from a truly random sample (see below) of about 450 school children, to establish norms for certain urinary amino-acids.

Survey of Genetical Abnormalities: This has covered the past five years, in ascertaining the incidence of four genetically caused abnormalities; white forelock, ichthyosis, congenital ptosis and alopecia areata: firstly, to establish norms for use as genetic markers and then to observe if there is a rising incidence of these abnormalities as a possible indication of increased hazards from stray radiation.

School Attendance: The absence rate of school children varies from school to school but each school has about the same rate from year to year. An attempt was made to ascertain if this can be explained by different types of illness in different schools, and the possible causes of higher rate of absence amongst school girls.

Road Accidents: A study was made of the health, intelligence and social conditions of the last 250 Belfast children involved in road accidents, by selecting a "matched pair" control group from School Health records. The findings were reported by Professor E. M. Backett in the "British Medical Journal" of 14th February, 1959.

Pregnancies and Abortions in Belfast Women in the year 1957: This very comprehensive investigation was undertaken by the Department of Social and Preventive Medicine in co-operation with the Maternity and Child Health Division. The findings were published in a series of three papers (Annals of Human Genetics, 1959, Vol. 23).

Analysis of deaths registered: The Registration Office for Births, Deaths and R. C. Marriages codes all deaths registered as part of an investigation being conducted by the Department of Social and Preventive Medicine, by permission of the Registrar-General for Northern Ireland, in order to ascertain if there is an association of environment with cause of death.

Atmospheric Pollution: The Department has co-operated with the Department of Social and Preventive Medicine and the Medical Research Council Air Pollution Research Unit, for the W.H.O. Lung Cancer Survey, by setting up five instruments in selected parts of the City for monthly recording of atmospheric pollution. The Department of Social and Preventive Medicine is also supplied with the readings taken on the Health Department's own instruments.

Estimation of Antigens for efficacy and reactions following injections: This type of research by field surveys has continued since the inception of diphtheria immunisation in Belfast in 1936 and it has proved of great value. In the earlier days of immunisation, certain kinds of antigen were found to be of low potency and the makers withdrew them from the market.

In 1946 a comparison between APT and PTAP was made. The high potency and low reaction incidence of PTAP was established and this antigen was in use in Belfast for some years before it became generally used in the United Kingdom. In spite of the fact that it was demonstrated in Belfast that the risk of provocation paralysis, through using PTAP, was remote, the use of alum-containing antigens was prohibited in 1957. We are convinced that their higher efficiency will lead to a change of policy and to their again being used in diphtheria immunisation, especially if the incidence of isolated outbreaks in the United Kingdom continues.

Whooping cough vaccine trials: The first trial of the efficacy of diphtheria-pertussis vaccine in Northern Ireland was made in Belfast in 1952 and reported to the Ministry of Health and Local Government in March, 1953. This successful trial established whooping cough prophylaxis in Belfast and, later, throughout the remainder of N. Ireland.

Diphtheria immunisation and Poliomyelitis in Belfast: A survey of provocation paralysis during the poliomyelitis epidemic of 1950. The risk was shown to be a remote one. (Published in the British Medical Journal, 7th April, 1951).

Recent reverses in Immunisation: A critique on a Medical Research Council report on immunisation failures during diphtheria outbreaks in Dundee and Tyneside, showing how similar failures had been overcome in Belfast. (Published in the Ulster Medical Journal, May, 1951).

Reactions to Diphtheria—Pertussis Antigen: A follow up of infants inoculated with combined antigen to show the frequency and type of reactions due to the inoculation. Over 2,000 infants were reviewed during a period of three years. The information obtained enabled Medical Officers to anticipate or treat undesirable reactions with success and confidence.

Poliomyelitis antibody in Children: A survey, in co-operation with the Department of Microbiology, Queen's University, of the natural immunity to poliomyelitis in children of varying ages and social status. (Published in the Lancet, April, 1956).

The 1957 Epidemic of Poliomyelitis in Belfast: The detailed epidemiology of the epidemic, and a one year follow-up of cases. (Published in the Ulster Medical Journal, June, 1960).

Mumps/Meningo-Encephalitis: A clinical, serological and epidemiological study of cases of encephalitis during an outbreak of mumps. (Published in the British Medical Journal, June, 1960).

Microsporion Canis: an intensive outbreak: A detailed investigation of the origin and spread of this infection and how it was eliminated. (Published in the British Medical Journal, November, 1957).

Epidemiology of Sonne Dysentery in Belfast: Emphasis was laid on the part played by institutional outbreaks and examples were cited to illustrate methods of control of infection. (Published in the Annual Report 1954).

Deaths from Meningococcal infections: An investigation into an unusually high incidence in Belfast illustrating inaccurate diagnoses and the difference in terminology of notification of cases and registration of deaths. (Annual Report 1956).

Variations in the failure rate of Smallpox vaccination: A statistical study which showed that the three main factors were the operator, the age of the infant and the prevailing temperature.

Accidents in the Home in Belfast: A classification of the fatal accidents, according to their type, over a period of three years (Annual Reports 1954-55-56).

Influenza Antigens—their efficacy and reactions: A study over two winters on Health Department Staff. Reactions were severe and frequent and the value of the antigen variable.

Epidemiology of Food Poisoning Salmonellae: An investigation, in association with the Department of Social Medicine, into the origin of salmonella infections.

Live Poliovirus Trials: from time to time volunteers were obtained for trials of various strains of live poliomyelitis virus by the Department of Microbiology, Queen's University.

Excretion of Poliovirus by normal Children: Illustrating the excretion rate in nursery school children under non-epidemic conditions. (Virus Reference Laboratory Report 1957; Queen's University).

Poliovirus in Belfast sewage: Sampling of Belfast sewage effluent for the presence of enteric virus. In non-epidemic conditions, no viruses were found.

Poliovirus in the Throats and Mouths of Clinical cases and Contacts: sampling to demonstrate the relative frequency of virus isolations from the anterior part of the mouth, the throat and from faeces. (Virus Reference Laboratory Report).

Efficacy of Quadrigen: A trial of the quadruple vaccine (Diphtheria-Tetanus-Pertussis-Poliomyelitis) at present in progress.

The value of the Schick Test in Adolescents: Serial reading of the Schick test and control in adolescents and the correlation with reactions to formol toxoid. The test was found to be of limited value in indicating reactors to formol toxoid.

Random sample of Belfast School Children: A truly random sample of any population is extremely difficult, if not impossible, to obtain, but this was done by selecting, from the School Health records, all children born on 1st January or 1st July in any year. This enabled us to check of the validity of the records and to provide the Department of Social and Preventive Medicine with a random sample for statistical purposes. The sample was proved to be close to the prediction obtained from the Registrar-General's figures and it was used in the Urinary Chromatography and Deafness-Cardiac Syndrome investigations (q.v.).

Onset of Puberty: In collaboration with Dr. Milliken of the Child Guidance Clinic, Belfast Hospital for Sick Children, the onset of puberty in a group of boys and girls was studied. The earlier onset which has been noted elsewhere was confirmed, particularly in girls. Onset of puberty in the 12th year is now common.

Long-term effects of Prematurity: This is being investigated by Guy's Hospital Paediatric Research Unit under Dr. Alison McDonald. 84 Belfast children born prematurely in 1951/53 were traced, examined (including I.Q.) and reported on by Medical Officers and Health Visitors. All were traced (including two who had died, for whom post-mortem reports were obtained). This investigation continues and its scope will probably be extended.

Height and Weight survey: About 12,000 Belfast school children were measured and tables and graphs published in the "Ulster Medical Journal", 1954, showing the mean, median, first and ninth deciles and standard deviation of each measurement for boys and girls at each year of age. This is used to determine how much any child varies from average, to judge if the variation is important and, by serial measurements, to see if improvement has occurred.

Foot development and Footwear: 400 secondary school girls were studied to assess the incidence of all types of foot defect and their relationship, if any, to footwear. The popularity of "casual" shoes is clearly established and these will continue to be worn despite any advice: nevertheless, no relationship was established between defects and footwear.

Deafness—Cardiac Syndrome: A new syndrome has been found in America in which deafness and a cardiac abnormality are associated, usually fatal, in adolescents. All Belfast deaf school children were re-examined and several were found with the characteristic prolonged S—T interval on E.C.G., indicating a conduction defect: these may also have low serum magnesium. Also found incidentally were a number of children with other less-marked abnormalities of the E.C.G., which may be a partial expression of the same syndrome. It has been necessary to do an E.C.G. survey on the random sample of 450 school children in order to establish the normal limits for E.C.G., which appears never to have been done for children although it is well known for adults. Work continues on this investigation.

Colour Blindness: an accurate assessment of the incidence of colour blindness in Belfast children has been made. Cases of the rare occurrence of complete colour blindness in girls have been found for investigation of Turner's Syndrome by Dr. A. C. Stevenson.

Crossed laterality and the educationally sub-normal Child: Medical Officers are recording the laterality of dominant eye, ear, arm and leg of all E.S.N. children, at the time of assessment. A study of these is being made in comparison with a control group of normal children.

Plantar Warts: 100 consecutive cases of this condition who had been referred to the Royal Belfast Hospital for Sick Children were reviewed in an attempt to ascertain the mode of infection, but this was inconclusive because of varying factors. There appears to be no foundation for the pre-conceived view that barefoot physical training, swimming baths and changing-room floors are the usual causes.

Twins: A large list of unlike twin boys and girls was produced for Dr. A. C. Stevenson, who was searching for cases of twins who are dizygotic on the paternal side but monozygotic on the maternal side. A large series of like twins was found for Professor Stoy, who was investigating which aspects of dental growth are determined genetically and which environmentally.

Ringworm: Investigation and elimination of an outbreak of M. Audouini in a residential school, mainly by X-ray epilation (reported in the "British Medical Journal", I. 536, 1952).

Case finding by Wood's light unearthed 1,000 cases. M. Audouini has been virtually eliminated from the City (British Journal of Dermatology, 63, 165, 1951).

Investigation and elimination of an outbreak of T. Sulphureum in a residential school, using a new method of case finding by brush and comb culture (comparable to Wood's light finding for fluorescent ringworm) was reported in the "British Medical Journal", 8th October, 1960. Elimination of T. Sulphureum from an infected institution has been said to be practically impossible, but it seems to have been accomplished in this case. The first prophylactic use of griseofulvin is also described.

Squint and Epilepsy: The incidence of squint, of epilepsy and of the two coinciding in the one child were calculated for Dr. Millar, Claremont Street Hospital.

Other Investigations:

(a) Case-finding of deafness, albinism, mongolism, muscular dystrophy, haemophilia, achondroplasia, arachnodactyly and osteogenesis imperfecta for various studies.

(b) D.P.H. Dissertations: Much work is done in providing material for dissertations by candidates for the Diploma in Public Health. Examples are: the variability of the hallux/metatarsal angle (Dr. Blaney); social adjustment of deaf pupils who have left special schools in 1940-1959 (Dr. Wolfenden) etc.

(c) Tracing and assessing I.Q., etc., of a group of children known to have been in the Fever Hospital with cerebro-spinal meningitis.

(d) Survey of a sample of children to assess their growth and nutritional state in relation to size of family and father's occupation (Dr. K. Newell).

(e) Assessment of vision and hearing of a group of school entrants (Professor Seth).

(f) Serial head X-rays and dental casts every 6 months from ages 5 to 15 years of about 400 school children, in a study of dental growth (Mr. P. Adams).

Mr. A. S. Irving:

Mr. A. S. Irving, L.D.S., Chief Dental Officer, retired on 1st July, 1960, after nearly 34 years' service in the Department, during which he served first as a part-time officer, becoming Chief Dental Officer 23 years ago. The high efficiency of the excellent dental services provided by the Health Committee owes much to his professional and administrative skill in developing and improving them. In particular, the Dental Section of the new Health Clinic at Cupar Street is a monument to his meticulous and painstaking planning, the final result being testimony to his foresight and attention to detail. The staff of the Health Department wish him health and happiness in his retirement. His successor, Mr. S. R. Sheane, who has had considerable service in the Department, has our good wishes and he has already proved himself a keen and far-seeing Chief Dental Officer.

This occasion gives me the opportunity to thank the Health Committee for what they have done to promote the health and well-being of the citizens of Belfast. I wish to acknowledge with thanks the consistently loyal service given by members of the Health Department staff during the year, as well as the help accorded by other Corporation Departments.

I have the honour to be,

My Lord Mayor, Ladies and Gentlemen,

Your obedient servant,

W. G. SWANN,

Medical Officer of Health and Port Medical Officer.

CAUSES OF DEATH AT DIFFERENT AGE PERIODS, 1960

TABLE 1

Abbreviated List Nos.	Causes of Death	Total Deaths	MALES											FEMALES																				
			All Ages	AGED							Total Under 1 year	1-4	5-14	15-24	25-44	45-64	65-74	75 & over	All Ages	Under 1 mth	1 mth-1 y	1-9 mths	10-14 mths	Total Under 1 year	1-4	5-14	15-24	25-44	45-64	65-74	75 & over			
	All Causes	4,737	2,392	103	26	11	140	19	26	29	95	763	631	689	2345	70	28	5	103	15	11	11	87	505	568	1045								
B1	Tuberculosis of Respiratory System	28	16								1	11		4	12																			
B2	Tuberculosis, other Forms	3	1		1		1								2																			
B3	Syphilis and its sequelae	19	14									7	5	2	5																			
B4	Typhoid Fever																																	
B5	Cholera																																	
B6	Dysentery, all Forms						1																											
B7	Scarlet Fever and streptococcal sore throat	2	2					1																										
B8	Diphtheria																																	
B9	Whooping Cough																																	
B10	Meningococcal Infections																																	
B11	Plague																																	
B12	Acute Poliomyelitis	1	1						1																									
B13	Smallpox																																	
B14	Measles																																	
B15	Typhus and other Rickettsial diseases																																	
B16	Malaria																																	
B17	Other Infective and Parasitic Diseases		6																															
B18	Malignant Neoplasms, including neoplasms of lymphatic and haematopoietic tissues	12											3	1	2																			
	(a) Cancer (B.18)	793	420					1	1		11	178	128	101	373					3	2	2	19	153	96	98								
	(b) Hodgkins disease and Leukaemia (B.51)	37	22			1	1	2		4	2	6	5	2	15						1	2	1	3	5	3								
B19	Benign and unspecified neoplasms	22	10								2	4		4	12						1		1	2	1	7								
B20	Diabetes Mellitus	21	4												17																			
B21	Anaemias	16	5												11																			
B22	Vascular Lesions affecting Central Nervous system	596	212						2	1	6	35	77	91	384																			
B23	Nonmeningococcal Meningitis	4	1				1								3				1															
B24	Rheumatic Fever	2	1							1					1																			

[illegible]

Number of deaths, death rates and percentage of total deaths by age groups

TABLE 2

Age Group (Years)	Deaths			Rate per 1,000 of population of age group (based on 1951 Census figures)	Percentage of total deaths	
	Male	Female	Total		1960	1959
Under 1 Year	140	103	243	30.6	5.1	5.7
1— 4	10	15	34	1.0	0.7	0.5
5—14	26	11	37	0.5	0.8	0.5
15—24	29	11	40	0.6	0.8	0.7
25—44	95	87	182	1.5	3.8	3.5
45—64	763	505	1,268	13.4	26.8	27.4
65—74	631	568	1,199	46.7	25.3	26.6
75 and over	689	1,045	1,734	141.2	36.7	35.2

Principal causes of death in order of importance

TABLE 3

1.	Heart Disease (B26-27)	..	..	..	..	..	..	1,476
2.	Cancer	..	..	..	..	..	..	793
3.	Vascular Lesions affecting the central nervous system	..	..	..	..	..	..	596
4.	Bronchitis	..	..	..	..	..	..	309
5.	Pneumonia	..	..	..	..	..	..	229
6.	Violent and accidental deaths	..	..	..	..	..	..	161
7.	Hypertension	..	..	..	..	..	..	134
8.	Chronic rheumatic heart disease	..	..	..	..	..	..	102
9.	Associated with prematurity	..	..	..	..	..	..	73
10.	Congenital malformations	..	..	..	..	..	..	72

Comparative Statistics for Counties and County Boroughs, 1960

TABLE 4

Area	Rate per 1,000 population				Rate per 1,000 live births	
	Marriage	Birth	Death	Death rate from Tuber- culosis	Infant Mortality	Maternal Mortality
Northern Ireland	7.0	22.5	10.8	0.08	27	0.44
Belfast County Borough	8.5	20.1	10.9	0.07	28	0.34
Londonderry Co. Borough	8.9	32.1	10.5	0.17	28	1.16
County Antrim	6.6	23.5	10.3	0.09	27	0.32
County Armagh	6.4	23.5	11.7	0.14	30	1.44
County Down	5.8	21.3	11.1	0.08	23	0.36
County Fermanagh	5.5	21.1	11.4	0.04	22	—
County Londonderry	5.8	24.9	9.8	0.04	28	0.36
County Tyrone	6.1	24.5	10.5	0.05	31	—

TABLE 5

Year	Heart Disease		Cancer		Pulmonary Tuberculosis		Bronchitis, Influenza and Pneumonia	
	Number	Rate Per 1,000	Number	Rate Per 1,000	Number	Rate Per 1,000	Number	Rate Per 1,000
1910	—	—	—	—	825	2.1	1,538	3.9
1915	—	—	—	—	813	2.0	1,667	4.1
1920	—	—	—	—	762	1.8	1,566	3.8
1925	—	—	—	—	575	1.3	1,163	2.7
1930	852	2.0	466	1.12	346	1.0	839	2.0
1935	935	2.0	463	0.99	389	0.89	1,042	2.23
1940	1,387	3.1	576	1.29	412	0.93	1,001	2.25
1945	1,130	2.59	664	1.52	326	0.75	533	1.22
1946	1,302	2.92	682	1.53	343	0.77	692	1.55
1947	1,482	3.29	662	1.47	281	0.62	618	1.37
1948	1,281	2.81	696	1.53	269	0.59	438	0.96
1949	1,407	3.09	699	1.54	280	0.61	536	1.18
1950	1,500	3.33	717	1.59	225	0.5	565	1.26
1951	1,630	3.67	693	1.56	221	0.49	813	1.83
1952	1,416	3.18	757	1.7	151	0.34	483	1.0
1953	1,155	2.56	758	1.68	114	0.26	466	1.03
1954	1,348	3.0	777	1.7	84	0.18	482	1.07
1955	1,365	3.0	741	1.6	76	0.17	597	1.3
1956	1,297	2.9	840	1.89	74	0.16	471	10.6
1957	1,383	3.14	844	1.9	60	0.13	592	1.34
1958	1,493	3.42	822	1.88	56	0.13	549	1.25
1959	1,443	3.33	802	1.85	62	0.16	657	1.51
1960	1,476	3.4	793	1.84	28	0.07	546	1.25

— Signifies information not available

**Comparative Statistics; Belfast, Northern Ireland, England and Wales,
Scotland and Irish Republic, 1960**

TABLE 6

	Belfast	Northern Ireland	England and Wales (See Note)	Scotland	Irish Republic (See Note)
1. Rates per 1,000 population:					
Marriages ..	8.5	7.0	7.5	7.7	5.5
Births ..	20.1	22.5	17.1	19.4	21.4
Deaths ..	10.9	10.8	11.5	11.9	11.5
2. Death rates per 1,000 live births:					
Maternal ..	0.34	0.44	0.4	0.3	0.6
Infant ..	28	27	22	26	29
3. Death rates per 100,000 population:					
Tuberculosis ..	6	8	7.5	10	16.5
Cancer ..	184	162	168	205	161
Heart Diseases (B25—28) ..	340	397	381	410	398
Coronary disease	229	186	198	207	138
Diphtheria ..	Nil	Nil	0.01	Nil	0.07

Note: Figures for England and Wales and Irish Republic provisional

Population, births, birth rate per 1,000, deaths, death rate per 1,000 and
natural increase from 1890

TABLE 7

Year	Population	Births		Deaths		Natural increase
		Number	Rate	Number	Rate	
1890	232,222	8,250	35.5	6,861	29.5	1,389
1895	295,000	9,772	33.1	7,168	24.3	2,604
1900	359,000	11,192	31.2	7,642	21.3	3,550
1905	360,000	11,395	31.8	7,178	20.0	4,217
1910	391,167	10,888	27.8	7,284	18.6	3,604
1915	403,000	10,196	25.3	7,220	17.9	2,976
1920	413,000	12,144	29.4	7,234	17.5	4,910
1925	438,000	10,234	23.4	6,131	14.0	4,103
1930	415,151	9,558	22.7	5,451	12.9	4,107
1935	415,151	8,848	21.3	6,238	15.0	2,610
1940	444,500	8,704	19.6	6,583	14.8	2,121
1941	444,500	8,383	18.9	6,641	14.9	1,742
1942	444,500	9,659	21.7	4,973	11.2	4,686
1943	425,000	10,713	25.2	5,511	13.0	5,202
1944	430,800	10,456	24.3	5,176	12.0	5,280
1945	435,900	9,853	22.6	5,069	11.6	4,784
1946	444,687	10,327	23.2	5,326	11.9	5,001
1947	450,000	10,505	23.3	5,289	11.7	5,216
1948	455,020	9,744	21.4	4,684	10.3	5,060
1949	454,340	9,185	20.2	5,226	11.5	3,959
1950	450,000	8,834	19.6	5,082	11.3	3,752
1951	444,222	8,789	19.8	5,433	12.2	3,356
1952	444,200	8,506	19.1	4,778	10.8	3,728
1953	450,800	8,527	18.9	4,653	10.3	3,874
1954	449,100	8,302	18.5	4,810	10.7	3,492
1955	453,900	8,100	17.8	4,752	10.5	3,348
1956	444,800	8,212	18.5	4,632	10.4	3,580
1957	440,100	8,459	19.2	4,899	11.1	3,560
1958	436,200	8,263	18.9	4,818	11.0	3,445
1959	433,800	8,365	19.3	4,821	11.1	3,544
1960	433,900	8,736	20.1	4,737	10.9	3,999

Deaths from cancer by sex and site in 1960

TABLE 8

Detailed List Nos.	Sites	Males	Females
	Buccal Cavity and Pharynx		
140	Lip	—	—
141	Tongue	5	1
142	Salivary gland	—	1
143—144	Mouth	5	2
145—148	Pharynx	5	2
	Digestive Organs and Peritoneum		
150	Oesophagus	8	10
151	Stomach	71	56
152—153	Intestines	44	56
154	Rectum	18	17
155—156	Biliary passages and liver	12	18
157	Pancreas	16	14
158	Peritoneum	2	3
159	Other digestive organs	2	—
	Respiratory System		
160	Nose, nasal cavities, etc.	1	1
161	Larynx	1	2
162—163	Trachea, bronchus and lungs	134	25
164	Mediastinum	1	—
165	Thoracic organs (secondary)	1	—
	Breast and Genito-Urinary Organs		
170	Breast	1	58
171—174	Uterus	—	45
175	Ovary, Fallopian tube and broad ligament	—	15
176	Other female genital organs	—	1
177	Prostate	28	—
178	Testis	2	—
179	Other male genital organs	3	—
180	Kidney	6	3
181	Bladder and other urinary organs	19	8
	Other and Unspecified Sites		
190—191	Skin	3	4
192	Eye	—	1
193	Brain and other parts of the nervous system	6	8
194	Thyroid gland	1	2
195	Other endocrine glands	1	—
196	Bone	6	5
197	Connective tissue	1	1
198—199	Other sites	9	10
200—202 } 203—205 }	Neoplasms of lymphatic and haematopoietic tissues (exclusive of Hodgkin's disease, leukaemia, etc.)	8	4
	Total	420	373

Deaths from certain communicable diseases from 1890

TABLE 9

Year	Meningo- coccal infections	Diph- theria	Dysentery	*Gastro- Enteritis	Measles	Polio- myelitis	Scarlet fever	Typhoid fever	Whooping cough	Influenza
1890	—	37	—	247	378	—	41	177	292	—
1895	—	34	—	325	197	—	88	184	109	—
1900	—	54	—	241	42	—	14	261	115	—
1905	—	32	—	295	227	—	35	128	24	—
1910	3	27	—	241	504	—	18	18	259	—
1915	39	27	—	240	177	0	107	10	134	—
1920	4	45	1	223	132	0	94	34	84	243
1925	0	38	0	203	167	0	49	18	99	84
1930	—	22	0	116	6	—	7	2	65	38
1935	0	55	0	249	251	2	37	11	22	65
1940	22	85	0	316	150	1	10	1	54	161
1945	2	7	1	188	10	4	2	1	26	16
1950	5	3	0	37*	5	11	2	1	16	32
1951	4	1	4	54	3	2	1	0	4	232
1952	4	0	0	43	4	2	0	0	10	18
1953	2	0	0	70	3	1	0	0	8	24
1954	2	0	1	29	2	1	0	0	2	20
1955	5	0	3	31	2	0	0	0	10	34
1956	10	0	1	8	0	1	0	0	6	27
1957	0	0	0	12	2	2	0	0	1	63
1958	1	0	1	13	0	0	0	0	5	13
1959	3	0	3	12	1	0	0	0	7	40
1960	0	0	2	10	0	1	0	0	0	8
Average Annual Deaths 1950-59	3.6	0.4	1.3	30.9	2.2	2.0	0.3	0.1	6.9	50.3

— Signifies information not available

* From 1950 onwards, deaths of those under 2 years of age only.

Notifications of certain communicable diseases from 1900

TABLE 10

Year	Cerebro-spinal fever	Diphtheria	Dysentery	Food poisoning	Gastro-Enteritis	Infective hepatitis	Measles	Polio-myelitis	Puer-peral pyrexia*	Scarlet fever	Ty-phoid fever	Whooping cough
1900	—	407	—	—	—	—	—	—	44	658	1,777	—
1905	—	234	—	—	—	—	—	—	19	650	631	—
1910	—	238	—	—	—	—	—	—	16	734	95	—
1915	65	179	—	—	—	—	—	1	6	1,994	49	—
1920	8	300	—	—	—	—	—	1	48	1,939	210	—
1925	5	423	—	—	—	—	—	0	5	1,657	143	—
1930	24	118	—	—	—	—	—	9	20	1,132	32	—
1935	19	1,201	—	—	—	—	6,203	22	31	3,394	117	337
1940	166	1,165	—	—	—	—	5,062	2	9	1,266	17	701
1945	39	213	—	—	—	—	1,702	20	1	768	14	603
1950	22	45	35	55	377	28	4,209	109	4	1,668	5	1,078
1951	34	10	170	40	560	54	3,354	36	4	349	24	834
1952	44	3	69	16	489	74	2,702	65	56	399	7	2,131
1953	29	1	112	26	614	59	3,146	47	55	612	8	945
1954	32	1	217	23	513	59	1,613	14	42	496	5	773
1955	26	0	401	29	689	65	4,328	3†	46	791	23	1,460
1956	20	0	198	31	412	166	1,797	9	37	540	8	790
1957	14	0	269	18	410	112	4,109	141	50	492	4	119
1958	9	0	310	24	430	83	280	11	29	384	2	1,132
1959	14	0	278	27	450	179	4,731	11	18	506	10	721
1960	2	0	276	58	455	296	487	3	36	519	0	88
Average Annual Notifications 1950-59	24	6	206	29	494	89	3,027	45	34	624	10	998

— Signifies information not available

* Figures up to 1951 for Puerperal fever only

† Diagnosis of two of these cases was subsequently amended to Diphtheria and acute Encephalitis

NOTES:—

1. Food poisoning notifiable only since 1949.
2. Measles—notifiable only as the first case occurring in a household within a period of 2 months.
3. Whooping cough—notifiable only as the first case occurring in a household within a period of 3 months.

Notification of certain communicable diseases in 1960, by age periods and sexes.

TABLE 11

DISEASE	Under 1 Year		1 Year and under 2 Years		2 Years and under 5 Years		5 Years and under 10 Years		10 Years and under 15 Years		15 Years and under 25 Years		25 Years and under 45 Years		45 Years and upwards		Age unknown		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Typhoid fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Nil
Dysentery ..	31	17	8	20	40	44	30	25	5	8	2	10	2	6	9	15	—	4	276
Scarlet fever ..	4	1	13	7	115	125	106	110	14	9	2	3	—	—	—	—	—	—	519
Cerebro-Spinal meningitis ..	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Polioomyelitis ..	1	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	3
Infective hepatitis ..	—	—	—	1	14	17	75	62	39	40	16	12	7	7	1	3	—	2	296

Type and age grouping of Dysentery notifications

TABLE 11A

DYSENTERY TYPE	Under 1 Year		1 Year and under 2 Years		2 Years and under 5 Years		5 Years and under 10 Years		10 Years and under 15 Years		15 Years and under 25 Years		25 Years and under 45 Years		45 Years and upwards		Age unknown		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Sonne ..	20	13	6	12	31	28	18	20	4	5	2	7	1	5	7	13	—	2	194
Flexner ..	11	4	2	8	6	10	5	2	1	1	—	2	—	—	1	1	—	1	55
Not classified ..	—	—	—	—	3	6	7	3	—	2	—	1	1	1	1	1	—	1	27
Total ..	31	17	8	20	40	44	30	25	5	8	2	10	2	6	9	15	—	4	276

Diphtheria Immunisation

During the year 5,032 children completed a course of immunisation against diphtheria; of these 2,504 were immunised by the Health Committee's Medical Officers at clinics, schools, etc., and 2,528 by general practitioners. In addition, 1,245 children received reinforcing injections, 1,034 by Health Committee's Medical Officers and 211 by general practitioners.

TABLE 12 Age Grouping of Immunised Children

Age at end of Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	At end of 1960
0—	116	147	158	147	330	357	269	610	911	900	
1—	1,982	2,167	1,809	1,719	1,885	1,978	1,677	1,945	2,240	2,316	Age Groups 1—4 years 14,788 =49%
2—	1,210	937	885	920	857	791	724	746	751	573	
3—	393	413	329	301	315	356	276	275	362	243	
4—	224	196	240	198	246	258	201	150	218	178	
5—	520	690	526	522	642	668	622	179	237	256	Age Group 5—9 years 20,788 =58%
6—	669	912	782	834	999	922	749	57	155	244	
7—	441	464	398	528	509	497	373	43	106	171	
8—	193	210	177	262	227	190	112	29	71	72	
9—	81	76	45	73	68	42	17	6	36	29	
10+	102	128	92	101	63	43	45	3	87	50	
TOTAL	5,931	6,340	5,441	5,605	6,141	6,102	5,065	4,043	5,174	5,032	

WHOOPING COUGH IMMUNISATION

(Children Immunised with Triple Antigen; Diphtheria/Pertussis or Pertussis alone.)

TABLE 13

Age at end of Year	1953	1954	1955	1956	1957	1958	1959	1960	Total of age Group At end of Year
0—	99	131	310	338	258	586	904	814	814 (11%)
1—	1,023	1,446	1,729	1,838	1,596	1,884	2,179	2,216	3,120 (42%)
2—	354	687	719	676	642	707	698	526	3,291 (43%)
3+	131	233	372	471	353	497	639	506	

COMMUNICABLE DISEASES

Continued progress was made in the control of infectious diseases. The incidence of typhoid fever fell to zero; diphtheria has been at this level for six years now. Record low levels were registered for cerebrospinal fever (2 cases); whooping cough (88 cases) and tuberculosis (357 cases).

Only three diseases require comment; infective hepatitis, food poisoning and dysentery.

Infective Hepatitis: Belfast is one of the few areas in the United Kingdom where this condition is notifiable. In 1960 there was a substantial increase in notifications; 296 compared with 179 in 1959. The age distribution (Table 11) shows that the most susceptible group is the school child. While control of this infection in the general population is not yet possible, it has been shown that outbreaks in boarding establishments, amongst children of school age, can be controlled by the use of gamma globulin. This procedure is highly recommended, as the disease is not without a fatality rate.

Food Poisoning: Only sporadic cases occurred, yet the total number of notifications, 58, is the highest recorded since 1949. Many cases yielded no pathogens, but the following bacteriological isolations of salmonella types were made: *S. Typhimurium*, 8 cases; *S. Panama*, 2 cases; *S. Dublin*, 1 case; *S. St. Paul*, 1 case; *S. Give*, 1 case; *S. Enteritidis*, 1 case. These occurred mainly in the last quarter of the year but no common foodstuff could be blamed.

Dysentery: This continues to be endemic, mainly affecting young children in family outbreaks. There was one outbreak in an old persons' home which resulted in one death. As far as possible, bacteriological confirmation was sought for each case. This is recorded in Table 11A and shows that a high proportion (22%) of the cases was of the Flexner type, and that the great majority (75%) of that type were children under 5 years of age.

Poliomyelitis: The three cases were non-immunised children: they occurred in the early summer and this gave a stimulus to immunisation. No further cases followed.

Tuberculosis: During the year a mass radiography survey was carried out in West Belfast. This resulted in an increased notification of cases from some wards but, in spite of this, the total notifications for the whole city fell by 22 to a record low level of 357.

The age grouping was that of recent years, i.e., the incidence is highest in the over 60's, with a preponderance of males. The high incidence in the 15—25 age group is disappointing but no doubt it will be reduced as the number of B.C.G. vaccinated children enter this age group.

An increase in non-pulmonary tuberculosis was due to increased notification of glandular tuberculosis in the elderly; 9 of the 11 cases over 60 years of age were so classified.

IMMUNISATION

The most important disease against which immunisation is offered is whooping cough, because of its universal prevalence and high fatality rate in young infants. There was a fractional increase in the numbers immunised, but mothers still do not bring their infants at a sufficiently early age; the majority of infants are at least nine months of age before they are first brought to the immunisation clinic, hence their immunisation is not completed until they are a year old.

Poliomyelitis immunisation continued as before; few people came during the winter months followed by a panic rush when the three cases of poliomyelitis appeared in the early summer. No further cases occurred. Vaccine supplies were much improved.

As the immunisation programme becomes more extensive, it becomes imperative that records be adequate and permanent. A personal record card is issued for each child brought to a clinic and this is proving of great value; the percentage of cards reported lost is not high.

A settled immunisation programme has still to be achieved, although it is under consideration in many places. A successful programme must bring the period of maximum immunity close to the period of greatest risk of infection. For example, whooping cough immunisation, given separately, starting at two months of age; then diphtheria, tetanus and poliomyelitis at six months of age. Thermal reactions following whooping cough immunisation make it desirable that it be kept separate, while the inherited passive immunity against poliomyelitis allows immunisation to be delayed until six months of age at least.

A small scale trial of influenza vaccine was carried out on volunteers from the staff. The absence of an epidemic rendered it impossible to assess its efficiency, but the proportion of allergic reactions which followed inoculation was too high to make it universally acceptable.

W. J. McLEOD, M.D., D.P.H., D.P.A., Ph.C.,

Senior Medical Officer, Environmental Health Division.

POLIOMYELITIS VACCINATION

Table showing the age groups of persons inoculated from May, 1957 to December, 1960

TABLE 14

	One Injection only		Two Injections only		Three Injections			
	Total in age group at end of 1960		Total in age group at end of 1960		Age at end of year			Total in age group at end of Year
					1958	1959	1960	
Under 1 year ..	106		406		17	39	14	
1 year ..	232		2,113		542	792	1,088	
2 ..	178	1,653	1,376	6,687	897	2,052	2,258	12,045
3 ..	648		1,407		667	1,920	1,347	
4 ..	489		1,385		662	2,009	1,079	
5 ..	379		1,319		627	2,016	1,067	
6 ..	370		1,153		555	2,000	1,249	
7 ..	455		1,632		497	1,862	1,151	
8 ..	398		1,760		510	1,736	1,135	36,529
9 ..	466	4,011	1,627	15,541	415	1,705	1,157	
10 ..	409		1,695		405	1,617	1,176	
11 ..	303		1,827		301	1,595	1,310	
12 ..	358		1,842		240	1,592	1,459	
13 ..	415		1,508		176	1,419	2,114	
14 ..	458		1,178		96	1,000	2,281	
15—25 ..		4,218		12,517	17	4,073	14,739	20,101
25—40 ..		1,054		3,129		841	3,660	4,501

REPORT OF THE CHIEF PUBLIC HEALTH INSPECTOR FOR THE YEAR 1960

The Belfast Health Authority have never lagged behind in matters of environmental hygiene. A fully organised service under the Medical Officer of Health is staffed by qualified Public Health Inspectors who have the assistance of an experienced clerical staff.

The Public Health Inspectors in visiting houses, factories, shops and many other types of business concerns come into close association with individual members of the public. A defect in the structure of a house, a complaint about the quality of the milk, a smoky factory chimney, a case of infectious disease, an infestation of vermin, a smallpox contact, a typhoid fever carrier, food poisoning, all involve personal relationships, and apart from the discharge of their official duties the officers listen to worries and problems in which they have to exercise tact, discretion and sympathy. The Inspectors make an important contribution towards individual and communal health.

The experience of legal and technical difficulties of slum clearance have been surmounted to some extent by the enquiry held by the Ministry of Health and Local Government, during the early part of the year, but another and more difficult obstacle has to be faced by the local authority, that of shortage of land for housing development. Other methods are being tried to overcome this serious problem, such as the construction of multi-storey flats. The problem of shortage of building land limits the number of houses which can be cleared away in any one year and this in its turn must affect the number of houses represented to the local authority as unfit.

It is pleasing to report that great consciousness is being shown in many food establishments to the public demand for improved standards of food hygiene. This has been effected in structurally improved premises presenting food displays under more spacious conditions, especially self-service under orderly arrangements. Improved lighting facilities (natural and artificial) hygienically designed shop fittings, glass screening with refrigerated food cabinets are already contributing to the safeguarding of food and preventing aerial contamination by dust, flies and other means. This hygienic presentation of food invites public confidence and patronage. Attention is being paid to the necessity for scrupulous cleanliness by shop assistants, particularly to the hands and to the need for the wearing of clean overalls. Objectionable habits in the wrapping of food are also being gradually eliminated. Pre-packed food is the greatest safeguard against the problems of the human factor causing contamination.

On the 30th August itinerants were ordered off a site owned by the Ministry of Commerce at Tillysburn on the Holywood Belfast Road outside the Belfast City Boundary where they had camped for many years. Most of the 25 families, including 80 children, travelled to a site on the Ormeau Embankment. The ground on which they camped at the Embankment belongs to the Corporation and officials from the City Surveyor's Department stood by as the Police cleared it. As the tinkers moved off most of them were undecided where to go. The Public Health Inspectors' duties in Belfast are considerably increased by this type of dweller who has taken up position on any vacant ground available, thereby causing a nuisance due to the absence of sanitary accommodation, water supply and receptacle for the storage of refuse. In addition, as they have no furniture, they gather around their hovels all descriptions of junk including old mattresses and other discarded bedding, etc. During the year 211 Statutory Notices were served on itinerants for the abatement of public health nuisances in and adjoining shacks erected on lands in various parts of the City. 66 summonses were subsequently served for non-compliance with notices. It was necessary to issue 4 disobedience summonses for non-compliance with Magistrates' Orders to abate public health nuisances. The fines imposed by the Courts amounted to £216.

378 plans were inspected during the year for the purpose of ensuring compliance of the proposed premises with the relevant legislation: such proposals for alterations included factories, shops, food manufacturing, tenement dwellings, flats, etc.

The number of defects discovered by Public Health Inspectors and referred to other Departments during the year and not recorded elsewhere in the body of this Report was:—

Estates Superintendent for defects discovered in Corporation dwelling houses	520
City Surveyor for various nuisances and defects	1,677
Belfast City and District Water Commissioners for defects in water fittings	872

Sewerage and sewage disposal

The system of sewerage and sewage disposal is under the control of the City Engineer and Surveyor. During the year the Surveyor reported to the Improvement Committee that part of the sewer in Inverary Avenue had collapsed and an inspection had shown that in general this sewer was in bad condition. He considered it advisable to re-lay the sewer from near the junction of Inveresk Parade to Holywood Road at an estimated cost of £17,000. In view of the urgency of the matter it was necessary to commence the work forthwith by direct labour. The new high level intercepting sewer section 1 and the Cliftonville Road/Limestone Road sewer which will improve the drainage of the north-western part of the City were completed and plans are now in course of preparation for the construction of section 2 of the new high level intercepting sewer. Reconstruction of sewers has been completed in Ormeau Road and Quarry Road and is well forward in Park Road, Broadway and Iveagh Street. A tender has been accepted for the reconstruction of the sewer from Cupar Street to Mayo Street. Plans are being prepared for the construction of a storm water pumping station at Glenmachan Street and for reconstruction of sewer in Fane Street. A tender has been accepted for installation of a 500 gallons per minute dry well pump at Distillery Street Pumping Station. A tender has been accepted for the installation of a heating system in the Greencastle Pumping Station. Cleansing and repair of sewers generally was carried out during the year.

Refuse collection and disposal

This work is carried out by the City Surveyor's Department by direct labour under control of the Superintendent of Cleansing. For administrative purposes the city is divided into 16 districts, each being supervised by a Cleansing Inspector who is also responsible for street cleansing.

The amount of house refuse collected continues to increase and the weekly tonnage is now approximately 2,900 tons. During the year tipping was completed on the Holywood Road site adjoining Inverary Avenue. This ground which was a potential breeding place for mosquitoes is the property of the Belfast Education Authority and will now be converted into playing fields for schools. In June tipping commenced on low lying ground at Garnerville for the Parks Committee. Initial difficulties experienced in connection with the reclamation of the foreshore on the Antrim side of Belfast Lough are being overcome and work is now proceeding on the second section. The Health Department's services for rodent and insect control are utilised on tipping grounds. New flats were occupied during the year on one of the Annadale sites and for the first time in Belfast refuse containers of 1½ cubic yard capacity were installed. The emptying of these is by means of a dual purpose vehicle purchased specially to facilitate this work. This machine can also be used for ordinary 2½ cubic feet capacity dustbins.

During the year Public Health Inspectors made 296 inspections of private and Corporation tipping grounds within the City. In addition 13 rat destruction campaigns were carried out by the Pests Control Section in order to exterminate rats at the different tipping grounds. Special attention was also paid to the fly problem by the use of effective insecticides. During the year 39 treatments were carried out by the pest control section.

WATER SUPPLIES

The control of the public water supply is vested by Acts of Parliament in the Belfast City and District Water Commissioners. All drinking water supplied by public mains is sterilised by chlorine treatment. Routine bacteriological examination of all water under the control of the Water Commissioners was continued throughout the year by the Counties Public Health Laboratories, London. During the year 910 samples of water were taken from or adjacent to the different service reservoirs for examination. These consisted of 11 samples of water before treatment, 459 of filtered and chlorinated water and 440 samples of chlorinated water. The results showed 3 containing both bact-coli (Type 1) and coliform organisms and 7 containing coliform organisms. 17 samples showed a low pH value of the water. 11 samples of untreated water showed coliform organisms and bact-coli (Type 1). The results of the bacteriological examination of the raw waters were typical of waters, showing the normal deterioration in quality which occurs after heavy rain.

The following is a summary of reports on the bacteriological examination of water samples taken from consumers taps direct from distributing service mains throughout the City by officials of the Water Commissioners.

Samples examined during the year	..	..	..	..	629
Samples reported as highly satisfactory	..	..	..	..	592
Samples reported as showing coliform organisms	..	..	..	..	29
Samples reported as showing bact-coli (Type 1) and coliform organisms					8

Water Samples collected by the Health Department Staff from consumers' taps

Weekly samples have been submitted to the Central Laboratory, Northern Ireland Hospitals Authority for bacteriological examination. The premises from which samples are taken are selected to cover each week the different sources of supply to the several areas of the City. During the year under review the total number of examinations of samples thus taken was 300. Of this number 272 samples were reported by the Bacteriologist as highly satisfactory and the remaining 27 samples as unsatisfactory. The bottle containing one sample was broken.

The results of examination of the unsatisfactory samples are as follows:—

TABLE B 1

Coliform organisms (Count per 100 ml.)	Number of samples	Coliform organisms of faecal origin (Count per 100 ml.)	Number of samples
1—3	19	1—3	6
4—10	4	4—10	—
Greater than 10	4	Greater than 10	1

In addition to the above, of 17 samples taken from tenement dwellings, 15 were reported by the Bacteriologist as highly satisfactory and 2 samples as unsatisfactory because of the presence of coliform organisms.

Domestic water supplies from private wells, etc.

The Department continued to sample water from private supplies in the areas on the outskirts of the City where there is no public mains supply. During the year 196 samples of water were taken from private wells by Public Health Inspectors and examined at the Central Laboratory. The results showed that 45 of these samples were highly satisfactory, 9 satisfactory, 1 suspicious and 141 unsatisfactory because of the presence of coliform organisms of faecal and non-faecal origin.

The results of examination of Samples which were not highly satisfactory are as follows:—

TABLE B 2

Coliform organisms (Count per 100 ml.)	Number of samples	Coliform organisms of faecal origin (Count per 100 ml.)	Number of samples
1—3	22	1—3	26
4—10	28	4—10	14
Greater than 10	101	Greater than 10	87

127 samples contained both faecal and non-faecal coli.

Water supplies from artesian wells

During the year 80 samples of water were obtained from privately owned artesian wells for bacteriological examination at the Central Laboratory. The Bacteriologist reported 71 of the samples as highly satisfactory and the remaining 9 samples as unsatisfactory because of the presence of coliform organisms in the water. When unsatisfactory results were obtained investigations were made by the Food Inspectors with a view to tracing and eliminating the source of pollution.

Water from Mineral Water Manufacturers' premises

During the year 113 samples of water were taken by the Food Inspectors for bacteriological examination at the Central Laboratory. The results of the examination showed that 97 of these samples were highly satisfactory and 16 samples unsatisfactory due to the presence of coliform organisms.

The results of examination of the unsatisfactory samples are as follows:—

TABLE B 3

Coliform organisms (Count per 100 ml.)	Number of samples	Coliform organisms of faecal origin (Count per 100 ml.)	Number of samples
1—3	10	1—3	2
4—10	1	4—10	—
Greater than 10	5	Greater than 10	—

2 samples contained both faecal and non-faecal coli.

Public swimming baths

The City's four public baths are operated by the Corporation. They are Peter's Hill, Ormeau Avenue, Templemore Avenue and Falls Road and were built in the closing decades of the last century. Each has first and second class swimming ponds and private baths. The first class section of the Baths at Ormeau Avenue has, within recent years, been extensively renovated on modern lines with special attention given to pre-cleansing facilities and heated floors in the private baths section. Plans were completed and work commenced at the new District Baths to be erected at the Grove, York Road. The Corporation Health (Baths) Committee decided to replace Peter's Hill Baths with an improved version of district baths. The reconstructed building will continue to provide two swimming ponds, warm baths and accommodation for about 300 spectators, but it will be an up-to-date district baths incorporating the very latest techniques. The question of the form the reconstruction was to take arose out of the necessity to fix the boundaries of the baths site on the re-development plan for the Upper Library Street area.

It is understood that the boundaries of the existing site will be extended to some extent but that few, if any, housing units will be lost. If a larger scheme were contemplated it is estimated that up to 57 housing units would be lost. One suggestion for the building was that a pool of international size should be incorporated in the reconstruction, but this would have involved the loss of many housing units and was not considered to be an economic proposition having regard to the number of international events likely to be held in Belfast. It has been decided by the Committee not to start work on the reconstruction of Peter's Hill Baths until the new Grove Baths are in operation.

During the year the Senior Food Inspector took 169 samples of baths water for bacteriological examination at the Central Laboratory. 165 of these samples were returned by the Bacteriologist as highly satisfactory and 4 samples were unsatisfactory because of the presence of coliform organisms in the water. 316 samples of baths water were examined at the four indoor baths by Public Health Inspectors to ascertain the pH value of the water also the amount of free residual chlorine present. Of this number 22 showed unsatisfactory readings and action was taken in each case to remedy the deficiencies. Where structural defects were found at the time of inspection the Baths Superintendent was notified.

Number of Inspections carried out by Public Health Inspectors in	
indoor baths	485

Corporation open air swimming pools

37 samples of water were taken during the season from the Corporation's two swimming pools for bacteriological examination at the Central Laboratory. 28 samples were reported by the Bacteriologist as highly satisfactory and 9 samples were unsatisfactory because of the presence of coliform organisms including faecal coli.

The results of the bacteriological examination of the 9 unsatisfactory samples are as follows:—

TABLE B 4

Coliform organisms (Count per 100 ml)	Number of samples	Coliform organisms of faecal origin (Count per 100 ml)	Number of samples
1—3	—	1—3	—
4—10	2	4—10	—
Greater than 10	7	Greater than 10	7

7 samples contained both faecal and non-faecal Coli.

Most of the unsatisfactory samples recorded were taken when Falls Park pool re-opened after extensive renovations and installation of filtration and chlorination plant. The source of water supply to this pool is from a mountain stream which flows through cultivated lands before being fed into the pool. 36 samples of water from the pools were examined by Sanitary Officers to ascertain the pH value and amount of chlorine present in the water. 8 of these samples showed unsatisfactory readings on test.

Privately-owned open air swimming pools

32 samples of water were taken during the season from privately owned open air swimming pools for bacteriological examination at the Central Laboratory. Of this number 15 samples were reported as highly satisfactory and 17 as unsatisfactory because of the presence of coliform organisms, some of faecal origin.

The results of the bacteriological examination of the 17 unsatisfactory samples are as follows:—

TABLE B 5

Coliform organisms (Count per 100 ml.)	Number of samples	Coliform organisms of faecal origin (Count per 100 ml.)	Number of samples
1—3	1	1—3	3
4—10	12	4—10	2
Greater than 10	4	Greater than 10	4

9 samples contained both faecal and non-faecal Coli.

52 samples of water were examined by Public Health Inspectors at the pools in order to ascertain the pH value and chlorine content of the water. 19 of these samples showed unsatisfactory readings. Action was taken by the Inspectors to improve the quality of the water in open air pools where unsatisfactory readings were recorded.

Inspections carried out by Public Health Inspectors to open air swim-
ing pools 119

HOUSING ACTS (Northern Ireland), 1890 to 1956

In February a public enquiry was held by the Ministry of Health and Local Government, relating to a proposed re-development scheme. The enquiry lasted for 11 days. Objections from 800 owners of properties and from over 500 residents were among those placed before the enquiry into the Corporation's proposed slum clearance scheme for area "A" which was bounded by Upper Library Street, Peter's Hill, North Boundary Street, Denmark Street and Regent Street. The Housing (Miscellaneous Provisions) and Rent Restriction Law (Amendment) Act (Northern Ireland) 1956 opened up an entirely new sphere to local authorities in Northern Ireland because for the first time it enabled them to deal with areas of reasonable size for re-development, i.e., to clear all the buildings in the

area in question. The survey carried out under the 1956 Act showed that over 18,000 houses were unfit for human habitation, and it was estimated that in a few years time there would be about 25,000 unfit dwellings. The first question the Corporation had to decide was where to commence re-development. There was still a great shortage of housing in Belfast and certain areas had been zoned for commercial and industrial development. It was, therefore, necessary to commence with an area zoned as residential so that a great number of the people living in the area would be rehoused. It was also one of the worst areas in so far as housing conditions were concerned, including houses, commercial premises and industrial buildings. It therefore represented a very complex problem in re-development, from the point of view of public enquiry as it contained most, if not all, of the problems the local authority would have to face in other areas.

The area included some examples of the very earliest development in Belfast when the city was built up in courts and alleys. A great number of the houses, built before 1860, were without a rear passage: some had a stand pipe in the yard as the only supply of domestic water and some were in a very unstable condition. In any re-development scheme it is necessary to establish that at least one-third of the houses were unfit for human habitation and in this area all the houses fell into this category.

When the Health Department officers conducted a survey of the area they found 5,497 persons comprising 1,515 families residing in 1,318 houses which have outlived their usefulness, and having regard to the central position, the area could be much better used if it was re-planned. After considering many methods of dealing with the problem the Corporation came to the conclusion that the best solution for re-development was to plan to build 1,022 housing units in the area, i.e., 426 in fifteen storey blocks of flats and a further 197 units in three and four storey flats, 381 maisonettes and 18 houses. There would also be two shopping areas providing about 50 shops, public houses, garages, parking space and playing areas. The advantage of this layout would be to reduce the area occupied by streets. Through the scheme 77 per cent of the dwellings would be replaced and 65 per cent of the families re-housed. In August the Ministry of Health and Local Government approved the Corporation's scheme for area "A", subject to certain provisions. The Ministry's proposals and recommendations are as follows:—

- (1) The site occupied by the church at the corner of Trinity Street and Regent Street should be omitted from the scheme;
- (2) The omission of one 15 storey block of flats and the introduction of some three storey houses to meet the needs of large families: tighter planning of the four storey blocks would assist this;
- (3) The provision of accommodation for older persons, couples or single persons, possibly in the form of two-storey flatlets;
- (4) The provision of meeting places for social purposes sited conveniently on neighbourhood unit principles;
- (5) The linking of the small shopping precinct in stage five with the new shops facing Peter's Hill to make one sizeable precinct or alternatively the placing of this precinct further north, increasing it in size and making it visible from a traffic road;
- (6) The desirability of shop parking facilities being visible from a traffic road;
- (7) The more even distribution of garages and the provision of space to allow for the possibility of doubling the number in the future;
- (8) Sites to be made available for public houses should be distributed as widely as possible.

The Ministry also stated that it would be prepared to consider sympathetically, any proposal for an alteration of the scheme on the lines of these recommendations. Before giving the conclusions that had been reached, the letter stated "The Ministry sympathises with the Corporation's view that it is desirable to re-house in the area as many people as possible and that the most intensive use possible for housing should be made".

The mixed form of development proposed by the Corporation achieves this and the result should be a redeveloped area which is visually satisfying and at the same time offers that spaciousness which is sadly lacking in the area at present. None of these objects could be achieved by redevelopment in two storey dwellings. The Ministry appreciates that many people who have lived so far in such dwellings do not take kindly to the prospect of living in tall blocks of flats, but by tactful and intelligent management many of the problems which will be faced for the first time can be explained and smoothed over. The concept of a pedestrian shopping precinct is to be recommended as this provides a high degree of safety and convenience for shoppers. To be successful it must contain an adequate number

and variety of shops and the precinct proposed at Upper Library Street is suitable but the remainder of the shopping facilities are not ideal. The position with regard to publicans' licences is admittedly difficult but the Minister of Home Affairs has announced in Parliament his intention to introduce legislation to deal with the situation.

There are to be eight stages in the scheme for redeveloping area "A" and the approximate dates for the starting of demolition work have been announced as follows:—

Stage 1, July, 1962—Alton Street, California Street, Carrick Hill Place, Kildare Street, Upper Library Street, Old Lodge Road, Park Street, Sidney Street, Upton Street and Wall Street.

Stage 2, April, 1963—Lower California Street, Lime Street, Old Lodge Road, Peter's Hill, Sherbrook Street and Woodford Street.

Stage 3, January, 1964—Concord Street, Upper Library Street, Regent Street, Lower Regent Street, Stanhope Street, Trinity Street, Tyrone Street and Unity Street.

Stage 4, October, 1964—Arnon Street, California Street, Hartley Street, Old Lodge Road, Park Street and Stanhope Street.

Stage 5, July, 1965—Arnon Street, California Street, Hartley Street, Stanhope Street, Unity Street, Wall Street, Upper Library Street, Christopher Street, Israel Street, North Boundary Street, Old Lodge Road and Upper Townsend Street.

Stage 6, April, 1966—Christopher Street, Israel Street, North Boundary Street, Peter's Hill, Upper Townsend Street, Cavour Street, Dagmar Street, Denmark Street, Hanover Street and Old Lodge Road.

Stage 7, January, 1967—Antrim Street, Cavour Street, Dagmar Street, Denmark Street, Hanover Street and Old Lodge Road.

Stage 8, October 1967—Broadbent Street, Old Lodge Road, Peter's Hill, Regent Street, Upper Library Street, Tyrone Street, Unity Street and Wall Street.

During the year the General Purposes Committee appointed an eight-member deputation to consult with the Minister of Health and Local Government in regard to housing policy. The Corporation's representatives were received by the Minister on 29th February. It subsequently reported receipt of a letter from the Ministry stating that the suggestions put forward by the Corporation's representatives that a "neutral assessor" be appointed to designate land in the Belfast area suitable for public authority house building had been adopted and that they were arranging to carry out at the Government's expense a comprehensive survey which would cover drainage, sewerage, water supply, social amenities, etc. The Ministry asked that the Corporation place all necessary facilities and information at the disposal of the person appointed to enable him to carry out the survey and stated that they were asking other local authorities concerned to do the same. The Committee expressed their willingness to co-operate in every way possible in the carrying out of the proposed survey. A letter was also received from the Ministry suggesting that the Corporation consider approaching the Housing Trust with a view to making arrangements with the Trust to build houses on their behalf and it was decided to refer the suggestion to the Housing (Clearance and Redevelopment) Committee for investigation and report thereon in due course to the General Purposes Committee.

During the year two privately built blocks of luxury flats were completed and let for occupation. The buildings are situated in Lansdowne Road and are designed not to look like flats but rather a detached house. The two storey buildings have two flats on each floor separated by the hall and landing respectively. The flats have been planned to afford maximum privacy with bright spacious rooms and labour saving design. Each contains an entrance hall, living room, main bedroom, two other bedrooms, dining room, bathroom, working kitchen and larder and a cloakroom recess off the hall, also an outside fuel store.

The total number of permanent dwelling houses completed and occupied within the City during the twelve months was 774. In addition 156 self-contained flats, 91 maisonettes and 31 old persons houses were provided. 170 dwelling houses, 84 flats, 91 maisonettes and 31 old persons houses were provided by the local authority and 604 dwellings houses and 74 flats were provided by private enterprise. Table B 6 shows the sites with the number of dwellings houses and flats erected by the local authority and Table B7 shows the number of dwelling houses and flats erected by private enterprise in the four divisions of the City.

TABLE B 6

Site	Dwelling houses	Flats	Maisonettes	Old person's dwellings
Knocknagoney	70	9	36	—
Annadale No. 2	—	29	55	5
Sylvan Street	—	18	—	—
Avoniel Road	3	—	—	—
Templemore Street.. ..	2	—	—	—
Ravenscroft Avenue	4	—	—	—
Springfield Road	4	26	—	—
Lisavon Street	35	—	—	—
Clara Park	—	—	—	26
Turf Lodge	26	—	—	—
Gainsborough Drive	26	—	—	—
TOTALS	170	82	91	31

TABLE B 7

Division	Dwelling houses	Flats
North	27	15
South	100	32
East	251	25
West	225	2
Central	1	—
Totals	604	74

28 single private dwelling houses were converted into flats.

Sites and capacity where contracts have been placed by the Corporation for the building of dwelling houses.

TABLE B 8

Site	Capacity	Contracts placed	Number completed			Number to be completed		
			Houses	Flats	Old persons dwellings	Houses	Flats	Old persons' dwellings
Turf Lodge ..	637	631	26	—	—	605	—	—
Gainsborough Drive	36	36	26	—	—	10	—	—
Carlisle Street	35	35	—	—	—	—	—	—
Lonsdale Street } ..			—	—	—	—	35	—
Eglinton Stree }			—	—	—	—	—	—
Kimona Street ..	23	23	—	—	—	23	—	—
West Circular Road	119	119	—	—	—	63	56	—
Arizona Street ..	10	10	—	—	—	10	—	—
Glasgow Street ..	12	12	—	—	—	12	—	—
TOTALS ..	872	866	52	—	—	723	91	—

At 31st December, 1960, the total number of dwelling houses provided and owned by the Belfast Corporation since the commencement of Local Authority Housing Schemes was 11,480 comprising:

Permanent houses built and purchased prior to 1939	3,016
Permanent houses built under Belfast Improvement Order, 1910.. .. .	250

Permanent houses built from 1946 to 1960	..	..	..	..	..	..	..	5,735
Permanent flats built from 1946 to 1960	..	..	..	..	..	..	..	1,486
Temporary (prefabricated) bungalows	..	..	..	..	..	..	..	993
Three houses became derelict and five houses sold to the Ministry of Commerce (Northern Ireland) in connection with the new North Approach Road.								

The number of homeless applicants registered with the Belfast Corporation at the 31st December, 1960, was 7,458.

The survey of dwelling houses to discover their suitability for representation in clearance or redevelopment areas continued during the year. 7,302 such dwellings were examined for this purpose. Table B9 shows the number of inspections in each of the four divisions of the City.

TABLE B 9

North Division	South Division	East Division	West Division
2,015	1,798	509	2,980

The Medical Officer of Health reported to the Housing (Clearance and Re-development) Committee 14 individual dwelling houses as unfit for human habitation and not capable at a reasonable expense of being rendered so fit. The Housing Committee made Demolition or Closing Orders or accepted undertakings in accordance with the Housing Acts (Northern Ireland) 1890–1956 in the case of 8 houses and deferred consideration of the remainder as they were situated within potential clearance areas. During the year the Health Department dealt with 819 enquiries from prospective house purchasers concerning property which might be within potential clearance and redevelopment areas.

Houses let in Lodgings

If the houses in the City now occupied as tenement dwellings were occupied in the manner originally intended housing conditions would be mainly satisfactory. The chief factor responsible for slum conditions is the overcrowding caused by the fact that there are not enough houses for the population. Houses suitable for one family, and in many cases small even for one large family, are occupied by several families, sometimes to the extent of one family per room. The overcrowded families are naturally mostly from the poorest strata of society and often of low social standard. The resulting squalor is increased by decay of the fabric of the houses which such occupation induces.

In 1955 the Corporation made By-Laws to control tenement dwellings and the undernoted figures give some account of the work carried out by the Sanitary staff during the year.

Inspections	..	..	..	..	..	..	853
Sanitary defects discovered	..	..	..	..	..	..	222
Sanitary notices served on owners and occupiers	..	..	..	..	..	..	136
Sanitary defects remedied	..	..	..	..	..	..	142
Summonses issued for non-compliance with By-laws	..	..	..	..	..	..	63
Summonses issued for continuing offences	..	..	..	..	..	..	4
Number of houses registered as at 31st December, 1960	..	..	..	..	..	..	168
Number of families in occupation	..	..	..	..	..	..	648
Number of rooms	..	..	..	..	..	..	1,049
Number of adults	..	..	..	..	..	..	1,222
Number of children	..	..	..	..	..	..	517
Amount of fines imposed by the Courts for non-compliance with By-laws	..	..	..	..	..	..	£56 15s. 0d.

Rent and Mortgage Interest (Restrictions) Act (Northern Ireland) 1920 to 1956

The following table shows the number of applications received for certificates and reports issued and refused from 1st September, 1951, until 31st December, 1960.

(a) During 1960:—

Certificates and reports outstanding at 31st December, 1959	..	17
Applications for certificates and reports	.. .. .	1,248
Certificates issued to tenants	.. .. .	753
Reports issued to landlords	.. .. .	226
Refusal of certificates to tenants as the dwelling houses were found to be in good and tenantable repair	.. .. .	7
Refusal of reports to landlords as all the work specified in certificates had not been completed	.. .. .	242
Number of applications for certificates and reports cancelled	..	27
Certificates and reports to be dealt with at 31st December, 1960	..	10

(b) Totals from 1st September, 1951 till 31st December, 1960:—

Applications for certificates and reports	.. .. .	40,341
Certificates and reports issued	.. .. .	35,006
Reports issued to landlords	.. .. .	6,916
Certificates issued to tenants	.. .. .	28,090
Reports refused	.. .. .	4,564
Certificates refused	.. .. .	504
Certificates and reports cancelled	.. .. .	257

During the year inspections were made of 3,298 dwelling houses in the City for which Certificates of disrepair have been issued to tenants and where no applications had been received from landlords for reports in connection with the same.

The following analysis shows the conditions existing at the time of inspection:—

TABLE B 10

Conditions found on inspection	Divisions		Total
	South	East	
Number of houses inspected	1,256	2,042	3,298
Number of houses where work was satisfactorily completed	454	590	1,044
Number of houses where work was only partly completed	770	1,001	1,771
Number of houses where no work was done	32	109	141

In most cases listed above as “work only partly completed” the work done consisted mainly of items of disrepair listed on certificate issued to tenants for which Statutory notices under public health legislation were issued by the Department for associated sanitary nuisances.

According to information obtained from the tenants at the time of inspection the number “paying” or “not paying” the statutory increases of rent permitted under the 1951 and 1856 Acts was as follows:

TABLE B 11

Conditions	Paying increase	Not paying increase
Work completed	972	72
Work partly done	1,414	357
No work done	70	71
TOTALS	2,456	500

A difference of 342 exists between the total figure shown in Table B10 compared with that shown in Table B11. This is due to the officers being unable to obtain information at the time of inspection.

Discretionary points system for allocation of housing accommodation on medical grounds

Medical certificates are received by the Estates Superintendent from doctors giving medical and social reasons for re-housing; subsequently the Public Health Inspectors carry out detailed inspections and ascertain the actual living conditions of the families concerned. The evidence is submitted to the Medical Officer of Health for his consideration and reported to the Estates and Markets Committee. There was a reduction by 50 per cent of medical certificates received as compared with the year 1959.

Number of dwelling houses inspected for over-crowding or insanitary conditions	55
Rooms in dwelling houses inspected	224
Families occupying the dwelling houses	113
Adults	245
Children	129
Houses found to be overcrowded	33
Houses found to be in an insanitary condition	17
Applications where no recommendations were made	5

Planning (General Interim Development) Order (Northern Ireland), 1944

During the year the City Surveyor reported on the question of the conversion of dwelling houses to business premises and its effect on traffic flow. He tabled a map which had been prepared in collaboration with the City Commissioner of Police showing streets within the City where it was considered that it was in the interest of free traffic movement to curtail the number of parked cars and service vehicles likely to be associated with new shopping development. In this connection he submitted a list of street or parts of streets where it was considered that whole or partial conversion of dwelling houses to business premises should be refused under the Planning Acts on traffic grounds. After careful consideration the Improvement Committee decided that it would not be desirable to determine as a matter of policy that such development should not be permitted in the thoroughfares listed. They agreed, however, that the list and the map should be used Departmentally in connection with the making of recommendations to the Committee and they would, as heretofore, determine individual cases on their merits. 64 applications and enquiries were received from the City Surveyor's Town Planning Section for proposed development of various properties in the City such as the establishment of fat melting works, tripe cleaning and dressing, lime crushing and preparation, laboratory block in connection with pig curing, conversion of warehouses for the storage of offensive materials, waste-paper storage, packing and sorting, also the proposed conversion of dwelling houses, stores and other buildings into shops, office accommodation, hair dressing salons, club premises, recreation halls, home bakeries, second hand clothing establishments, etc.

In a number of instances the Health Department found it necessary to recommend disapproval on the grounds that public health nuisances were likely to arise owing to the close proximity of surrounding dwelling houses. In a number of instances approval was recommended on condition that the premises were altered to comply with existing public health legislation.

In 22 instances appeals were made to the Ministry of Health and Local Government (Northern Ireland) against the Corporation's planning decisions. The Town Planning Officer was responsible for the preparation of reports and giving of evidence in connection with all the appeals and of these 18 results were to hand at the end of the year. The Corporation's decision was upheld in 15 cases, while in 2 cases the appeal was allowed (1 having special conditions imposed and 1 having development restricted to a period of 5 years). One case was withdrawn at the hearing; of the remaining 3, 2 are sub judice and the other was adjourned sine die at the hearing.

Improvement and Conversion Grants for Older Houses

Property owners are still reluctant to take advantage of the grant scheme whereby the Corporation contribute 50 per cent of the cost of modernising older properties up to a maximum grant of £400. It is now apparent that almost all the applicants are owner/occupiers or persons intending to purchase for their own occupation. Applications for grants are dealt with by the City Surveyor and in each case he seeks the views of the Health Department on the suitability of the premises for conversion or improvement, prior to the application being considered by the Housing (Clearance and Redevelopment) Committee.

Number of applications for improvement and conversion grants for older houses	216
Number of applications refused	35
Number of applications approved	181
Number of improvements or conversions completed or in progress	49

**Public Health nuisances discovered and complained of in dwelling
Houses, etc., during 1960**

TABLE B 12

Nature of Nuisance	Divisions				Total
	North	South	East	West	
Drains, traps, etc., foul or defective	835	457	468	862	2,622
Tiling, paving or flooring defective	558	520	636	660	2,374
Sinks defective, or want of; waste pipes foul or defective	123	86	74	92	375
Water closets foul or defective; no water closet accommodation; soil or ventilation pipes defective, or want of	869	740	599	1,219	3,427
Dustbins defective, or want of	207	81	53	219	560
Roofs defective	979	1,562	1,767	2,716	7,024
Spouting defective or want of	1,409	1,121	1,268	1,692	5,490
Damp state	3,109	2,169	2,205	3,861	11,344
Plaster on walls and ceilings defective	584	717	521	650	2,472
Domestic water supply: want of, or unsuitable	143	10	7	11	171
Lighting or ventilation insufficient, or want of	158	60	43	76	337
Schools overcrowded	1	1	1	—	3
Dwelling houses overcrowded	18	1	21	9	49
Accumulation of manure or offensive matter; offensive smells; premises or passages dirty	325	135	85	275	820
Fowl or animals kept so as to be a nuisance	12	—	—	7	19
Schools dirty	—	—	—	—	—
Miscellaneous	1,295	1,374	1,184	1,421	5,274
	Total				42,361

Public health nuisances abated in dwelling houses, etc., during 1960

TABLE B 13

Abatement of Nuisance	Divisions				Total
	North	South	East	West	
House drains cleansed	420	193	185	415	1,213
House drains repaired and relaid	127	111	174	220	632
Houses had tiling, paving, flooring, etc., repaired ..	561	515	745	738	2,559
Houses had water closets cleansed or repaired	821	609	624	1,042	3,096
Number of dustbins provided	169	35	49	112	365
Houses provided with new sinks	7	—	—	4	11
Houses had roofs repaired	2,241	2,038	1,972	2,978	9,229
Houses had spouting repaired	1,407	1,274	1,427	1,805	5,913
Passages cleansed	2	8	10	14	34
Houses cleansed	2	8	10	14	34
Houses had minor repairs effected	1,782	1,882	1,505	2,623	7,792
Miscellaneous nuisances abated	103	38	12	87	240
	Total				31,118
Length in feet of drain pipes laid	263	328	345	1,163	2,099
Gully and disconnecting traps provided	16	12	19	26	73

Summary for 1960 in connection with dwelling houses

Complaints received and discovered	42,359
Inspections made	105,953
Statutory notices issued	19,854
Sanitary improvements carried out	31,118
Summonses issued for non-compliance with notices	2,164
Court Orders obtained for the abatement of nuisances	277
Summonses for disobedience of Magistrates' Orders	25
Disobedience convictions	25
Amount of fines imposed by the Courts	£526 14s. 7d.

By-laws made under Section 23 of the Public Health Acts (Amendment) Act, 1890, (relating to keeping water closets supplied with sufficient water for flushing).

Inspections during the year	..	..	..	..	..	1,240
Notices issued under the By-laws	..	..	..	..	..	620
Summonses issued for non-compliance with notices	..	..	..	..	..	84
Summonses for continuing offences	..	..	..	..	..	4

Keeping of Animals

Stabling yards within the City were systematically inspected by the Public Health Inspectors during the year, attention being paid to the frequency of removal of manure. General sanitation (including impervious paving of stables and yards) drainage, cleanliness and ventilation were enforced. Action was also taken by the Department against the common house fly throughout the season by the treatment of stables and manure pits with insecticide.

Number on register	..	..	..	..	..	118
Inspections during the year	..	..	..	..	..	854
Number of treatments carried out by Pest Control Section	..	..	..	..	..	283

Piggeries

There are now no piggeries within the City Boundary.

Burial Grounds and Crematorium

Within the next few months Belfast's new crematorium, the first in Northern Ireland, will be opened at Crossnacreevey, Castlereagh, on a site adjacent to Roselawn Cemetery. It is expected that the first cremations will take place during 1961. In taking this step Belfast Corporation is following a trend now generally accepted in Great Britain, believing that its citizens should have facilities for cremation available if they are requested. The Parks and Cemeteries Committee of the Corporation placed a contract for the construction of roads, subsidiary paths and sewers in connection with the secondary development at Roselawn Cemetery to provide 4,000 additional grave spaces. It is expected that this work will be completed in 1961.

Under the Public Health (Ireland) Act 1878 inspections of burial grounds were made by the Public Health Inspectors for the protection of public health and the maintenance of public decency.

Number of burial grounds in the city	..	..	..	..	10
Number of inspections during the year	..	..	..	..	78

In addition 6 exhumations and re-interments took place at different cemeteries in the City in accordance with licences issued by the Ministry of Health and Local Government. Public Health Inspectors were present on each occasion in the interest of public health.

Places of Public Entertainment

Routine visits to cinemas, theatres, dance halls and other places of public entertainment have been made during the year in accordance with the Public Health (Ireland) Acts and the Belfast Corporation Acts. Attention has been given to the cleanliness of the auditoria, seats, sanitary conveniences, staff and projection rooms and to the maintenance of adequate ventilation and a suitable temperature. There are now 35 cinemas and theatres in the City compared with 45 three years ago and there is a further possibility of more cinemas and theatres being closed.

Cinemas and Theatres

During the year 146 tests were carried out by means of the Kata Thermometer and Hygrometer. The number of readings recorded in these tests was 736. In 9 cinemas and theatres the rate of air movement was insufficient and after inspecting the plant notices were served on the management to

carry out improvements. At the end of the year alterations and adjustments had been made to the heating and ventilating systems in 5 cinemas and theatres and subsequent tests showed improvements, One major alteration commenced in 1959 was completed in 1960.

Number of cinemas and theatres in city	..	..	..	..	35
Inspections by Sanitary Officers (including evening inspections)	..			..	572
Number of sanitary defects discovered	..	..	..	..	29
Number of sanitary defects remedied	..	..	..	..	19
Number of cinemas closed during the year	..	..	..	..	5

Dance Halls

During the year 81 evening inspections were made and 51 air tests carried out. Insufficient ventilation was discovered in 8 instances and statutory notices were served on the occupiers to carry out works to improve the ventilating system. In one dance hall extensive alterations and additions were carried out including the installation of a modern ventilation system.

During the year Public Health Inspectors discovered two additional premises being used for public entertainment.

Number of Inspections (including evening inspections)	..	..	..	..	245
Number of defects discovered	..	..	..	..	59
Number of defects remedied	..	..	..	..	60
Number of Kata Thermometer readings	..	..	..	..	255

The following is a summary of defective conditions found in licensed and private dance halls, etc., inspected by Public Health Inspectors of the Factories and Shops Section.

TABLE B 14

Nature of defects	Instances	Notices served	Remedied	Outstanding
Insufficient ventilation	8	8	8	3
Damp or defective conditions	7	3	5	3
Dirty Conditions	5	4	7	1
Sanitary Conveniences:				
Not provided with proper intervening venti- lated spaces	2	1	2	1
Not provided for each sex	2	2	1	1
Not properly screened	1	1	1	—
Not properly lighted	4	3	4	1
Not properly ventilated	3	2	3	1
In a dirty state	7	2	7	1
In a defective condition	3	2	4	1
Insufficient accommodation	4	2	3	2
Insufficient or defective urinal accommodation	2	2	3	1
Unsuitable washing facilities or want of ..	2	1	2	1
Other defects	9	3	10	4
TOTALS	59	36	*60	21

* Defects remedied include defects outstanding from previous year.

Public Sanitary Conveniences

The Corporation's Improvement Committee has established a policy of abolishing, where possible, existing iron structures or replacing them with permanent structures. It will of course, take a number of years before this policy can be fully implemented, and difficulty is encountered in finding suitable sites for permanent structures. In recent years however, eleven iron structures have been removed and four permanent brick-built public lavatories have been erected. The matter is kept under constant review and negotiations are taking place for the acquisition of sites on the Shore Road and Donegall Road.

Inspections by Public Health Inspectors during the year	1,818
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Testing of Drainage Systems

During the year 916 drain tests were carried out by Public Health Inspectors, the Pest Control Officer, Factories and Shops Officers and Food and Drugs Inspectors. 519 tests were made as a result of complaints of the ingress of rats into buildings. 456 drains showed defects by smoke machine test. Of this number 245 had been tested by reason of complaint of rats and the remaining 211 because of complaints of offensive odours and other causes. A Statutory Notice under the Public Health (Ireland) Acts was served on the owner in each case where defects were discovered and repairs were subsequently carried out. New drains laid in place of those found to be defective were tested by the water test.

House drains completely re-laid	260
House drains repaired	372
Drain pipes, bends, traps, gullies, etc., used in repair of drains	2,172

Provision of Dustbins

Notices served under Section 44, Belfast Corporation Act, 1930 ..	140
Summonses issued for non-compliance with notices	1
Dustbins provided during the year	365

Marine Stores

Inspections during the year	430
Number of defects discovered	44
Number of notices served	33
Number of defects remedied	41

The periodical treatment of all rag stores to eradicate vermin continued throughout the year. The Pest Officers carried out 125 treatments and the cost was charged to the respective proprietors. The following is a summary of defective conditions found in marine stores by Public Health Inspectors of the Factories Section:—

TABLE B 15

Nature of defect	Instances	Notices served	Remedied	Outstanding
Walls in rooms not rendered vermin proof	2	1	2	1
Rooms not enclosed or provided with a proper roof or ceiling	2	1	2	—
Rooms not properly lighted	1	1	2	1
Rooms not properly ventilated	2	2	2	2
Rooms not provided with suitable floor	2	1	1	1
Materials stored so as to obstruct lighting or ventilation	3	1	3	—
Dustbins not provided or trade refuse not removed weekly	2	2	2	2
Premises not kept in a clean state	2	2	2	1
Walls, ceilings, partitions, etc., required re-decoration ..	2	2	2	2
Premises, apparatus, utensils not kept in a state of repair	2	2	2	1
Yards, loading bays, etc., not properly surfaced ..	1	1	1	1
Other defects	6	4	6	2
Sanitary conveniences				
Not provided with proper intervening ventilated space	1	1	1	—
Not provided for each sex	1	1	—	1
Not properly screened	4	1	3	2
Not properly lighted	3	3	2	1
Not properly ventilated	1	1	1	—
In a dirty state	4	3	3	1
In a defective condition	3	3	4	1
Totals	44	33	*41	20

* Defects remedied include defects outstanding from previous year.

Offensive Trades

These businesses require careful and regular supervision largely because of their nature and the offensive condition of the raw materials used. There are seventeen businesses in the City registered as offensive trades, consisting of six hide and skin merchants, three fat melters, two bone boilers, three gut scrapers and three tripe cleaners and boilers. During the year nine complaints were received by the Department concerning offensive smells, etc. Action was taken under the By-laws in every case where a nuisance was found to exist.

An application was received by the Department to establish the trade of fat melter, but as the premises were surrounded by shops, dwellings, etc., it was not considered to be a suitable site and was reported to the Medical Officer of Health accordingly. An application was received and considered by the Department for permission to establish the trade of tripe cleaner and boiler in premises adjacent to the City Boundary but as there was no laid on mains water supply and no proper sewerage system the project was not pursued further owing to the heavy capital expenditure involved in providing the necessary services in addition to erection of a suitable building. An application was received from a manufacturing firm of pet foods for permission to import and to use in the preparation of cat and dog foods unfit meat. The application was considered by the Health Committee and the matter was still under review at the end of the year.

Number of inspections during the year	102
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Primary and Secondary School Buildings

During the year a start was made on the new Secondary Intermediate School for Girls at Ballygomartin and alterations at Ashfield Girls' Secondary School. A new hall for Annadale Grammar School was completed. Substantial extensions to Park Parade Secondary School were partly occupied by the School in February and the use of the former Ormeau Park School as additional temporary accommodation was discontinued. Duncairn Junior and Mountpottinger Primary Schools were closed. The Mountpottinger premises were retained as an annexe to Beechfield Primary School to allow the remaining children to complete their primary schooling in the same building. The new Skegoniel Primary School and the assembly hall at Porter's Memorial Primary School were started during the year. Harberton School for junior educationally sub-normal pupils opened at the beginning of the year under review and has accomplished very good work. St. Mary's Primary School, erected at the junction of Barrack Street and Divis Street to replace the 106 year old school in Institution Place was opened in August. Built at a cost of £59,000 the school, which consists of seven classrooms, assembly hall, staff and principal's room, cloakrooms, toilet and other ancillary accommodation will provide for approximately 260 pupils.

A new voluntary secondary school was opened at a cost of £210,000 and will accommodate 400 pupils. It occupies seven acres at the junction of Ballysillan Road. The accommodation on the ground floor comprises assembly hall, music room, gymnasium, classrooms, general science room, preparation room, housecraft, laundry, showers, etc. The first floor accommodation comprises the library, classrooms, general crafts and art rooms. The sewage is lifted by pumps which have been installed in duplicate in a separate building. They are electrically operated and controlled for intermittent operation.

Nursery county primary schools	..	..	..	..	..	7
Nursery voluntary schools	..	..	..	..	..	1
County primary schools	..	..	..	..	..	75
Additional accommodation provided for primary schools:—						
(a) Premises rented for additional teaching space	..	..	..	..	..	8
(b) Premises rented for physical education	..	..	..	..	..	6
Voluntary primary schools under Roman Catholic Management	..	..	..	..	..	64
Approved schools for children requiring special educational treatment	..	..	..	..	..	22
Special county schools	..	..	..	..	..	7
Special voluntary schools	..	..	..	..	..	3
County secondary schools	..	..	..	..	..	18
Additional accommodation provided for secondary schools:—						
Premises rented for physical education	..	..	..	..	..	1

Voluntary secondary schools	22
Inspections by Public Health Inspectors during the year	469
Defects notified by School Health Service	4
Defects discovered by Public Health Inspectors	48
Intimations concerning defects sent to Director of Education or reported to Principal	7
Intimations concerning defects sent to Managers of voluntary schools ..	23
Sanitary improvements effected	28

Rivers Pollution Prevention Acts 1878—1893 Urban Drainage Act (Northern Ireland) 1957

Number of rivers in City	22
Inspections by Public Health Inspectors during the year	1,151
Nuisances discovered and abated	17

During the year the City Surveyor reported to the Improvement Committee that Castlereagh Rural District Council had agreed to co-operate in the execution of a scheme for the improvement of the Loop River from Abetta Parade to Knock Eden Crescent on condition that the relevant portion of their district was designated as urban, that the scheme was approved and attracted a 50 per cent grant and that each Council bore the nett cost of the works to be carried out in their area and 50 per cent of the cost where the stream served as the boundary. The estimated total cost of the work was £31,580 and the estimated nett cost to the Corporation on the aforementioned basis was £12,768. Authority was requested to prepare and submit to the Ministry of Agriculture a draft Urban Drainage Scheme for the Loop River and to publish such notices and negotiate for such wayleaves or permission as were required in pursuance of the Urban Drainage Act (Northern Ireland) 1957. The scheme was approved by the Improvement Committee subject to the Finance Committee's reporting on the proposal from a financial aspect, thereafter application to be made to the Ministry of Agriculture for sanction to the raising of a loan of £12,800 to meet the Corporation's proportion of the cost of the scheme. The scheme was subsequently approved.

Work is proceeding on the Blackstaff River Improvement Scheme. Approximately 400 linear feet of the relief culvert has been completed in cut and cover and 3,400 linear feet of tunnel driven. The new twin culvert to take the Blackstaff River under Donegall Road is now completed and approximately 400 linear feet of the new open channel in the Bog Meadows have been pitched.

At the end of the year work was almost completed on the Urban Drainage Scheme for the improvement of portion of the Knock River. Fortunately the dwelling houses in Donegall Road which have in recent years been subject to flooding after excessive rainfall were not affected during 1960. The protective barrier of earth formed at the rear of St. Katharine's Road and extending along the Blackstaff river has considerably increased the catchment area of flood water from the river and thereby reduced the flooding hazard to the inhabitants of this area. At Victoria Park repair work was carried out to the pitched bank alongside the Connswater River.

During the year samples of water were taken from the following rivers for bacteriological examination at the Central Laboratory, Northern Ireland Hospitals Authority:—

Ballygomartin 6, Blackstaff 15, Carr's Glen 8, Clowney 11, Connswater 9, Downview 6, Falls 6, Farset 3, Forth 11, Glen 2, Glenwood 14, Greencastle 6, Knock 15, Lagan 18, Loop 12, Milewater 6, Moat 3, Mount Vernon 3, Parkmount 3, Pound Burn 5, and Seaview 3.

The results of the examination of the water showed from 1 to 180+ coliform organisms present in 100 ml. from 0 to 180+ faecal coli present in 100 ml. and from 0 to 100,000 cl. welchii present in 100 ml. indicating that the rivers are subject to pollution.

Barbers and Hairdressers

These establishments are inspected by Public Health Inspectors under the Hairdressers Act (Northern Ireland) 1939 and the By-laws of 1947 relating to premises used for the trade or business of barber or hairdresser. The Act provides that no person shall carry on the trade of barber or hairdresser unless his premises are registered with the local authority. In the first instance all premises must be registered upon application in accordance with Statutory Rules and Orders (N. Ireland) 1939, but the local

authority apply the by-laws for the control of the trade and contraventions of the by-laws can result not only in financial penalties but, at the discretion of the Court, the removal of the offender from the register. It is the duty of the local authority once in every year, and also from time to time as may be necessary, to revise the register compiled in pursuance of the Regulations by deleting therefrom any entries relating to premises which have ceased to be used for the trade or business of barber or hairdresser.

Inspections of barbers' and hairdressers' premises during the year	..	1,427
Registered at 1st January, 1960	.. .. .	439
Registered during the year	.. .. .	42
Deleted during the year	.. .. .	33
Registered at 31st December, 1960	.. .. .	448
Number of contraventions of By-laws discovered and remedied	..	16

Common Lodging Houses

Common lodging houses continue to be used as housing accommodation by a number of people and the tendency for such persons to live in one lodging house instead of moving from one to another is more pronounced now than in the past. The number of lodging houses and of lodgers in common lodging houses in the city continue to diminish. There are now only five common lodging houses for males. The lodging houses are the joint responsibility of the Health and Welfare Departments and frequent visits are made by the staff of both Departments. Cleanliness of the premises and especially the beds and bedding continue to be a problem and regular visits followed by disinfestation of persons, beds, etc. are necessary.

Inspections by Public Health Inspectors during the year	106
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Atmospheric Pollution

Authorities in Northern Ireland will, like those in Great Britain, welcome the proposals of the Department of Scientific and Industrial Research to set up a national survey of air pollution. These proposals must be regarded a most important development as the present system has grown up over many years in a rather haphazard fashion, being formed by individuals and local authorities who became interested in the subject. It was in connection with this national survey that two experimental officers of the Department of Scientific and Industrial Research visited Northern Ireland during the year to see at first hand the work already being done and to give advice and widen the field of measurements in the province. This has resulted in some local authorities outside Belfast setting up recording instruments, and apart from making a useful comparison with Belfast, these records should be of immense value when the Government of Northern Ireland consider introducing legislation on similar lines to that operating in Great Britain since 1956. Recordings of solid deposited matter and sulphur dioxide in the air commenced in Belfast in 1954 and during the ensuing year valuable information has been collected, but it was not until late 1955 when the daily volumetric method for measuring smoke was introduced that some idea of the amount of smoke in the air was obtained.

Smoke and its control are of prime importance in any city as smoke particles can reach the lungs when breathed in and a knowledge of their concentration is, therefore, significant for medical research. It is considered that the present daily smoke filter is basically suitable for this purpose and that it probably provides a more valuable guide to the degree of air pollution in a city or district than do other forms of measurement. The position with grit and dust as measured by the deposit gauge is somewhat different as these materials fall close to their source and their distribution is localised. Measurements made by the lead peroxide method on a monthly basis to determine the sulphur pollution are suitable for a local survey to give patterns of pollution around individual plant. It follows that the results are of interest to the authority operating the monthly instruments. The Belfast Health Authority were the first in Northern Ireland to set up instruments to present a picture of the dangers arising from atmospheric pollution.

It is generally agreed that smoke from the open coal fire is one of the most harmful and dangerous constituents of air pollution. There may in the past have been a tendency not to overstress this because of the fear that, in doing so, the impression might be created that other forms of pollution

were of less importance. There is good reason for emphasising much more strongly the case against domestic smoke, not only because it is so serious, but also because its abolition is likely to require more effort and take more time than has been devoted to industrial forms of pollution. The open coal fire not only creates the worst form of smoke but because of its inefficiency actually emits, per unit of heat, more sulphur dioxide than any other form of fuel. Smoke is unburnt coal; it consists of carbon and soot and large numbers of minute particles of tar and hydrocarbons which come mainly from domestic smoke. The smaller these particles the more harmful they are to the respiratory system and most of the smaller particles come from the short household chimneys where there is less chance of coagulation than in taller industrial chimneys. The domestic smoke produced by distillation at comparatively low temperatures may contain up to twenty times as much tar and hydrocarbons as industrial smoke. The latest investigations carried out by the British Coal Utilization Research Association shows that every 100 lbs. of coal burned in an open fire emits into the atmosphere from 2½ to 5 lbs. of smoke. This amount is much greater than that from factory furnaces. The highest bronchitis rates are to be found in our larger and smokier cities and the Beaver Committee found that there was a clear association between air pollution and the incidence of bronchitis and other respiratory diseases. This association is of course greater during the winter months when domestic smoke predominates.

It is obvious that Health Education is going to play a major part in the campaign for clean air and it is necessary for progressive minded citizens to create an attitude throughout the community towards the desirability of clean air and the eradication of atmospheric pollution. The object of such a campaign would be to provide information on the causes and the effects of atmospheric pollution and the means to combat them and to show the general public how they could co-operate in fighting pollution. Engineers and Architects responsible for the installation of new fuel consuming plant are frequently faced with the difficulty of deciding the height of chimney required to obtain approval by the local authority. The major consideration is the discharge at ground level and the prevention so far as practicable of smoke, grit, dust and gases becoming prejudicial to health or a nuisance. Formulae are available for calculation but they are not very satisfactory and each case has to be judged according to the purpose of the chimney, the position and description of nearby buildings, the levels of the neighbouring grounds and any other matters requiring consideration such as type of fuel and method of burning. Because the use of mechanical draught leaves a tall chimney unnecessary for combustion purposes it has been the policy in recent years to design buildings with short chimneys in some cases even below the parapet of the building. It would seem that the appearance of a building was more important to designers than the disposal of smoke and gases and a high percentage of plans submitted for new buildings require amending so that the chimney is carried to a greater height in order to safeguard against possible down draught. The amount of solid matter deposited at the ten collecting sites remains reasonably steady with little variation from the previous year. The variation between the highest and the lowest recordings in the first nine months of the year was only approximately eight tons and the last three months of 1960 show a considerable drop from the corresponding period of 1959. Solids recorded at Ormeau Avenue site remains as in previous years the highest at 40.74 tons per square mile for the month of March. The collection of sulphur trioxide by the lead peroxide method also varied little with February showing the highest and June the lowest months. The graph for sulphur recorded by this method shows a steady decline from March to June with a gradual increase each month until the end of the year. The highest individual recording was 6.1 milligrammes of SO₃ per day at Northern Road site during March. Smoke and sulphur dioxide readings continue on a daily basis at seven sites. The central recording site at College Street showed somewhat heavier in sulphur pollution than at other sites, but smoke was heavier at Templemore Avenue site in the east of the city.

The following table shows the work done in connection with smoke abatement during 1960:—

Timed observations (each over a continuous period of 30 minutes)	..	768
Number of minutes black smoke observed .. .. .	..	632
Average number of minutes black smoke per 30 minutes observation ..		0.8
Statutory notices served .. .. .	..	23
Verbal notices given .. .. .	..	76
Plant inspections and advisory visits .. .. .	..	746
Complaints investigated .. .. .	..	65
Number of factory chimneys (approximately) .. .. .	..	350

Location of Atmospheric Pollution Recording Sites

Health Department

- | | |
|---------------------------|-------------------------|
| 1. Ormeau Avenue | 11. College Street |
| 2. Blythe Street | 12. Templemore Avenue |
| 3. City Cemetery | 13. North Road |
| 4. North Howard Street | 14. Balmoral Avenue |
| 5. Tennent Street | 15. Falls Road |
| 6. York Road Station | 16. Mountcollyer Street |
| 7. Bryson Street | 17. Lowwood Park |
| 8. Ravenscroft Avenue | 18. Northern Road |
| 9. Station Street | 19. Grove |
| 10. Musgrave Channel Road | |

Queen's University, Belfast

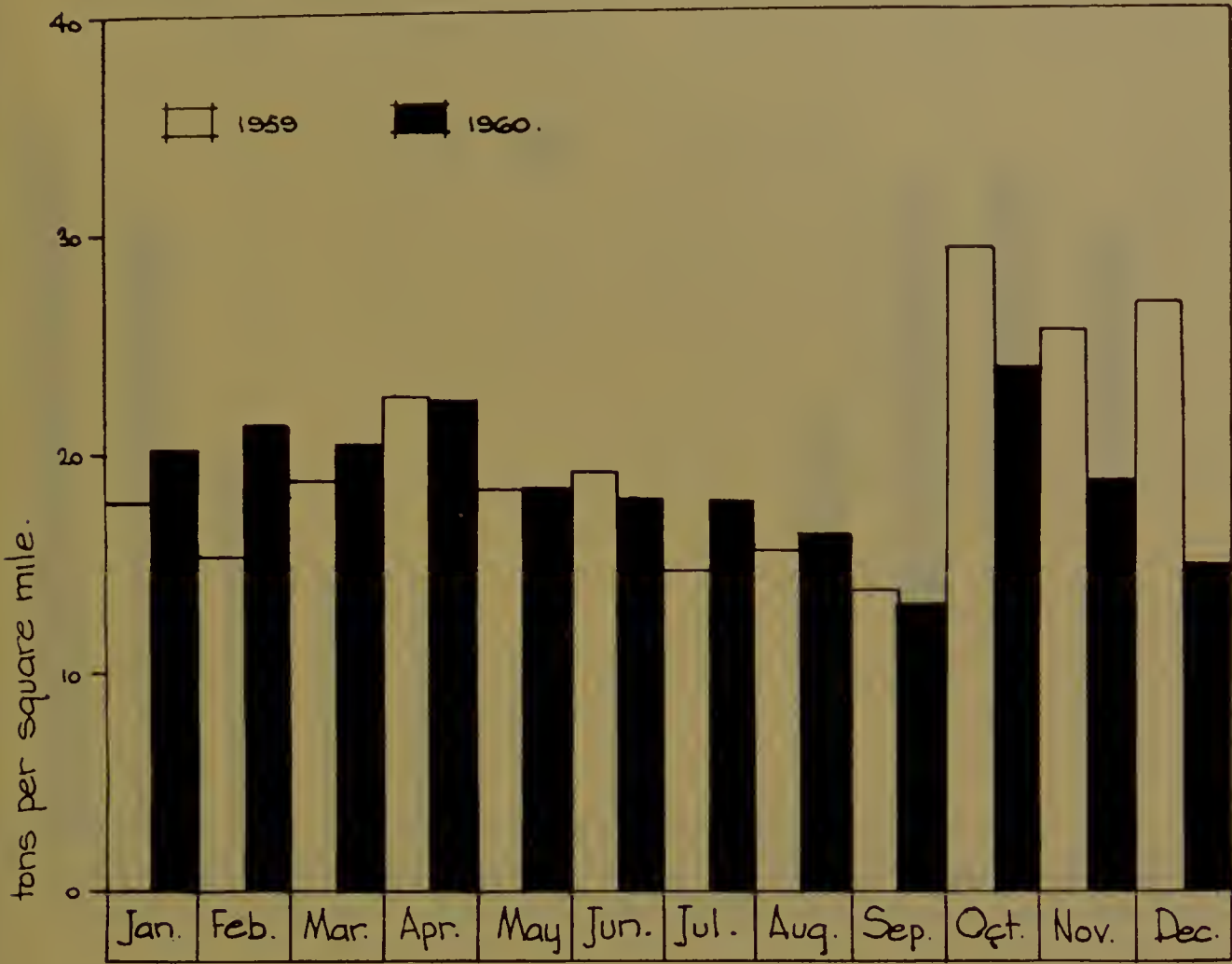
- | | |
|-----------------------------|----------------------|
| 20. Royal Victoria Hospital | 21. Stranmillis Road |
|-----------------------------|----------------------|

Belfast Corporation Electricity Department

- | | |
|--------------------------|----------------------------------|
| 22. Sydenham Airport | 27. Templemore Avenue |
| 23. Duncrue Street | 28. East Bridge Street |
| 24. Great Patrick Street | 29. Victoria Works, Queen's Road |
| 25. Skegoneill Street | 30. Thompson Dock, Queen's Road |
| 26. Park Avenue | 31. East Twin Lighthouse |

GRAPH ONE.

Monthly average of solid matter deposited , tons per sq. mile .



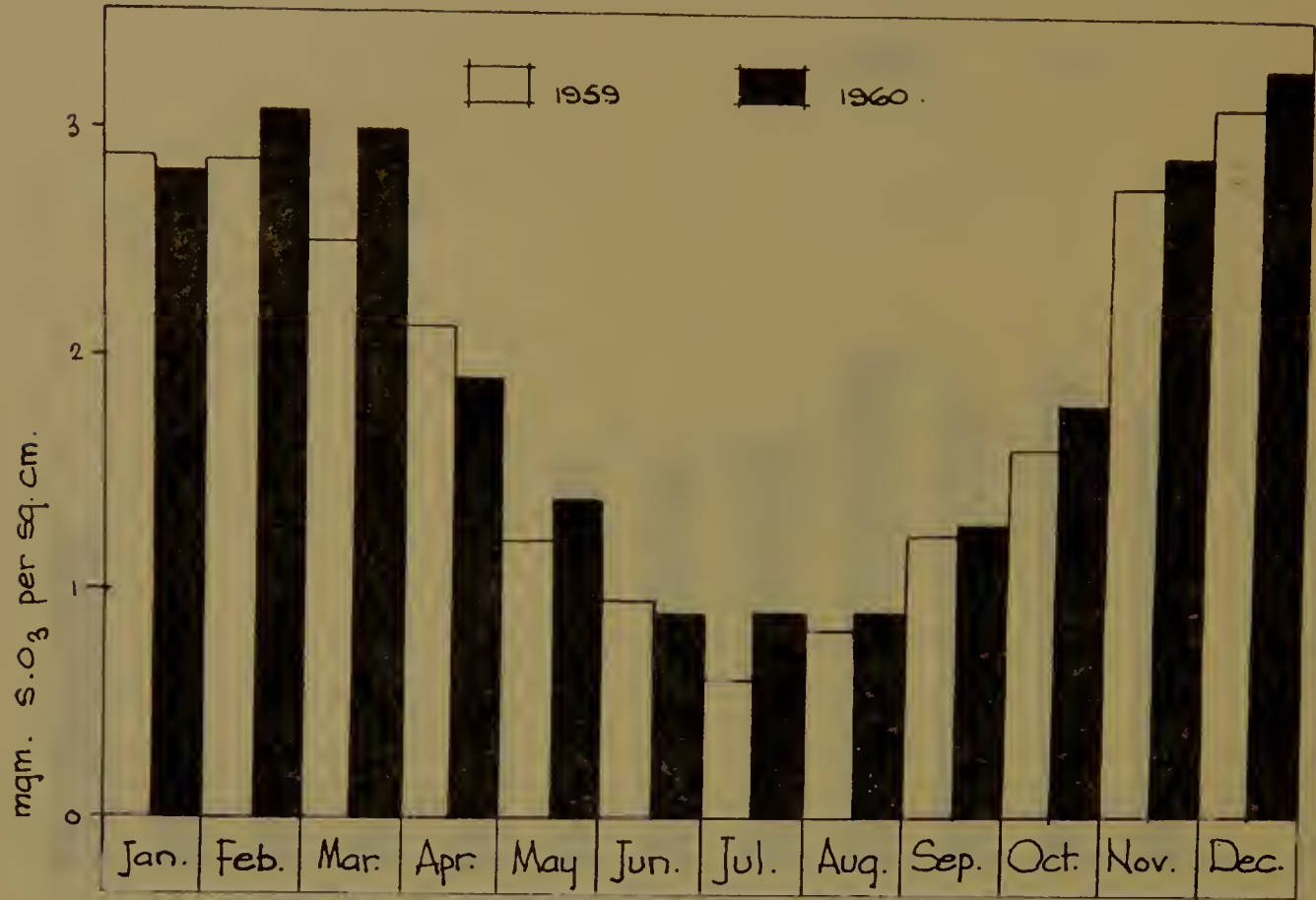
Solid matter deposited in tons per square mile at collecting stations during 1960 — (see also graph 1)

TABLE B 16

MONTH	Stations										Totals	Monthly averages
	1	2	3	4	5	6	7	8	9	10		
Jan.	34.66	16.99	9.90	18.05	18.24	31.68	21.51	13.96	25.64	20.37	211.00	21.00
Feb.	35.47	17.99	11.14	19.98	18.31	30.58	23.29	14.13	24.26	17.57	212.72	21.27
March	40.74	15.37	18.12	17.54	17.26	23.58	15.94	18.19	21.04	15.98	203.76	20.38
April	33.24	16.72	14.36	—	13.78	31.01	22.39	15.64	30.40	22.64	200.18	22.24
May	35.81	16.11	14.50	18.84	14.35	22.27	15.40	12.42	23.22	12.91	185.83	18.58
June	23.10	12.08	11.11	34.51	11.62	21.48	12.15	11.88	28.79	15.17	181.89	18.19
July	25.37	16.38	12.59	15.74	15.30	24.81	16.14	11.45	27.12	13.71	178.61	17.86
August	25.44	13.86	10.70	13.64	13.04	21.34	14.23	13.35	22.05	16.98	164.63	16.46
Sept.	22.73	13.49	9.46	13.01	10.64	20.51	—	9.93	17.72	11.91	129.40	14.38
October	40.03	22.65	15.87	21.01	18.54	31.41	22.72	17.72	28.46	18.44	236.85	23.68
Nov.	26.15	16.75	9.46	24.48	14.56	27.48	19.20	10.30	22.45	16.57	187.40	18.74
Dec.	17.26	10.07	8.32	19.31	12.16	25.28	12.58	7.42	18.49	18.58	149.47	14.95
Totals	360.00	188.46	145.53	216.11	177.80	311.43	205.55	156.39	289.64	200.83		
Averages	30.00	15.70	12.13	19.64	14.82	25.95	18.69	13.03	24.14	16.74		

GRAPH TWO.

Monthly average weight of SO_3 per 100 sq. centimeters of exposed surface per day. (Lead peroxide method).



Sulphur determination by the lead-peroxide method at the twelve stations during 1960—(see also graph 2)

TABLE B 17

MONTH	Stations												Totals	Monthly averages
	1	2	3	4	5	6	7	8	9	10	18	19		
January	2.6	2.3	1.3	2.6	2.9	3.8	3.3	2.2	3.9	2.7	2.7	2.9	33.2	2.8
February	3.2	2.2	0.9	4.1	2.4	3.2	3.3	2.4	4.1	3.1	5.5	2.7	37.1	3.1
March	2.7	1.6	1.5	3.5	3.2	3.5	2.7	2.1	4.0	1.8	6.1	3.1	35.8	3.0
April	2.1	1.4	0.6	2.4	1.6	1.6	1.6	1.6	2.6	2.8	2.9	1.4	22.6	1.9
May	1.4	1.9	0.6	1.6	1.2	1.0	1.3	0.9	1.4	1.1	2.4	1.8	16.6	1.4
June	1.2	0.7	0.36	1.1	0.7	1.2	1.0	0.8	1.4	1.3	1.6	0.54	11.9	1.0
July	0.7	0.5	0.17	0.8	0.54	1.3	0.8	0.7	1.2	1.6	1.9	0.4	10.6	0.9
August	0.7	0.8	0.45	1.0	1.0	1.2	1.1	0.9	1.1	1.6	1.5	0.55	11.9	1.0
September	1.3	1.0	0.45	1.4	1.7	1.2	1.4	1.1	1.5	1.3	1.8	1.4	15.5	1.3
October	1.9	1.8	0.9	1.7	1.8	2.2	2.5	1.8	2.3	1.5	1.5	2.0	21.9	1.8
November	3.4	2.3	0.5	4.3	2.9	3.1	3.2	2.3	3.2	2.3	4.3	2.5	34.3	2.9
December	5.6	2.1	0.8	3.9	2.1	3.8	3.6	3.0	4.4	2.8	4.9	3.4	40.4	3.3
Totals	26.8	18.6	8.5	28.4	22.0	27.1	25.8	19.8	31.1	23.9	37.1	22.7		
Averages	2.2	1.5	0.7	2.4	1.8	2.3	2.1	1.6	2.6	2.0	3.1	1.9		

SO₃ per 100 sq. centimetres as recorded by instruments maintained by Belfast Corporation Electricity Department

TABLE B 18

Month	Stations											Monthly averages
	22	23	24	25	26	27	28	29	30	31	Totals	
Jan.	3.16	2.94	4.34	3.07	2.03	2.92	1.82	4.12	3.02	2.09	29.51	2.95
Feb.	3.63	2.95	3.31	3.47	1.99	2.94	3.08	4.74	2.44	3.51	32.06	3.21
March	1.93	5.22	3.04	3.32	1.74	2.45	1.65	2.20	3.02	1.23	25.80	2.58
April	2.71	1.67	1.66	1.27	1.25	1.72	1.15	3.49	3.61	2.27	20.80	2.08
May	1.68	1.97	1.39	1.32	0.69	1.11	1.48	1.23	1.26	0.91	13.04	1.30
June	1.62	0.90	0.92	0.62	0.64	0.81	0.84	1.28	1.00	1.14	9.77	0.98
July	2.21	0.84	0.73	0.52	0.58	0.66	0.69	0.66	0.99	1.18	9.06	0.91
August	1.53	1.17	0.99	0.68	0.78	0.91	0.91	0.98	0.89	0.69	9.53	0.95
Sept.	1.43	2.70	1.20	1.66	0.92	1.25	1.00	1.32	1.39	0.82	13.69	1.37
October	1.06	2.24	1.95	1.66	1.30	1.26	1.38	1.04	0.89	0.64	13.42	1.34
Nov.	4.82	2.57	3.47	2.53	1.68	2.70	2.11	4.15	3.53	5.15	32.71	3.27
Dec.	4.37	3.01	3.69	2.76	2.29	3.16	2.51	4.78	3.32	4.21	34.10	3.41
Totals	30.15	28.18	26.69	22.88	15.89	21.89	18.62	29.99	25.36	23.84		
Averages	2.51	2.35	2.22	1.91	1.32	1.82	1.55	2.50	2.11	1.99		

TABLE B 19 Rainfall at ten deposit gauge stations for 1960

Station	Rainfall in inches											
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. 1 ..	4.02	3.63	2.29	3.59	1.93	2.56	4.84	5.32	2.88	5.91	4.29	2.56
No. 2 ..	4.37	2.95	2.29	3.75	1.97	2.76	5.36	5.24	3.07	5.79	4.45	2.60
No. 3 ..	4.53	3.31	2.13	3.39	1.93	2.44	5.63	5.36	2.92	4.77	4.10	2.84
No. 4 ..	4.22	3.47	2.29	—	1.81	2.40	4.18	5.32	2.84	5.20	4.37	2.48
No. 5 ..	4.49	1.99	2.52	3.07	1.97	2.36	5.28	5.63	2.84	5.67	4.29	2.40
No. 6 ..	4.06	2.94	2.36	3.19	1.69	2.17	4.71	5.36	2.90	5.16	4.14	2.52
No. 7 ..	3.82	3.08	2.60	3.62	1.97	2.25	4.77	5.40	—	5.79	4.89	2.40
No. 8 ..	3.43	4.74	2.40	3.15	1.97	1.77	3.66	4.81	2.76	5.91	4.10	1.61
No. 9 ..	3.94	2.44	2.44	3.58	1.97	2.17	4.65	5.44	2.92	5.79	4.61	2.48
No. 10 ..	2.96	3.51	2.13	2.22	1.18	1.97	3.23	4.96	2.40	3.31	3.55	2.33
Monthly average	3.98	3.21	2.34	3.28	1.84	2.28	4.63	5.28	2.84	5.33	4.28	2.42

Results of the Daily Volumetric Instruments maintained by the Health Department

((Concentration of Smoke (Milligrams per 100 cubic metres) and Sulphur Dioxide (parts per 100 million))

TABLE B 20

Month	Stations																																											
	11						12						13						14						15						16						17							
	Smoke			SO ₂			Smoke			SO ₂			Smoke			SO ₂			Smoke			SO ₂			Smoke			SO ₂			Smoke			SO ₂										
	ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr												
	24	88		3.3	22.5		36	110		5.1	12.2		20	79		2.9	11.9		19	71		2.2	6.9		18	70		2.0	6.8		29	117		6.2	24.1		20	133		3.2	21.9			
January	31	84		8.4	23.0		29	75		5.8	19.3		19	72		3.6	12.0		15	63		2.8	10.6		18	67		2.2	9.4		30	110		6.8	21.6		23	94		4.2	15.6			
February	18	31		5.3	8.6		22	33		3.9	7.1		10	20		2.0	5.2		11	26		2.4	4.7		12	22		1.9	4.7		19	30		2.6	10.4		11	23		3.6	9.6			
March	13	34		3.5	7.2		16	28		3.6	6.6		12	49		2.1	6.4		7	18		1.4	2.9		9	18		1.6	3.8		13	26		3.6	9.4		8	16		2.1	6.1			
April ..	8	17		2.6	6.7		9	18		2.2	4.0		4	12		1.2	3.6		6	13		1.4	5.0		7	15		1.3	3.0		11	23		5.0	8.6		7	18		1.9	3.6			
May ..	6	12		2.2	6.0		4	10		1.7	4.0		3	6		0.9	2.5		3	7		0.7	1.6		4	9		0.8	2.3		3	12		1.8	3.4		3	8		0.9	2.0			
June ..	6	13		0.8	3.5		3	5		0.7	2.7		4	10		1.1	2.7		3	5		0.4	1.0		2	6		0.3	0.7		2	7		0.7	1.4		6	15		1.0	1.6			
July ..	8	17		2.1	3.7		11	20		2.2	3.7		4	8		1.4	2.5		5	10		1.1	3.9		5	10		1.1	1.8		6	15		2.0	3.7		6	13		1.4	3.5			
August ..	9	20		2.0	3.2		15	26		2.5	4.0		7	15		1.3	2.9		6	19		1.0	2.8		7	13		0.9	1.5		7	24		2.6	7.2		7	21		1.3	2.7			
September	21	56		4.8	10.7		27	59		6.0	15.9		11	42		2.2	6.0		13	39		2.2	5.8		12	25		1.6	3.7		9	25		3.9	8.4		11	34		2.4	6.0			
October	34	142		7.6	29.4		37	161		6.6	33.6		20	114		4.0	19.3		19	81		2.5	6.1		18	53		2.4	10.5		20	48		6.7	14.9		24	72		4.7	15.3			
November	45	146		11.4	43.1		53	186		9.8	38.8		33	129		5.9	24.4		24	95		3.9	14.6		32	101		3.6	10.4		19	103		9.4	31.4		28	154		5.8	26.8			
December																																												

ma—Monthly average. hdr—Highest daily reading

Heaviest pollution—

Smoke—Templemore Avenue, 15th December; 186 Mg. per 100 cubic metres.

SO₂ --- College Street, 8th December; 43.1 parts per 100 million.

Lightest pollution—

Smoke---various dates June, July and August; no smoke recorded.

SO₂ — Balmoral Avenue, 4th--8th July; No SO₂ recorded.

Results of daily volumetric instruments maintained by Queen's University, Belfast

TABLE B 21

Month	Stations							
	20				21			
	Smoke		SO ₂		Smoke		SO ₂	
	ma	hdr	ma	hdr	ma	hdr	ma	hdr
January ..	34	95	4.8	11.0	31	75	4.3	9.5
February ..	27	82	3.5	8.6	28	76	3.8	7.7
March ..	23	38	4.1	8.8	19	34	2.5	4.6
April ..	13	35	2.8	6.7	13	29	2.5	5.3
May ..	9	20	2.2	4.3	9	15	1.8	2.7
June ..	4	11	0.9	2.3	4	9	0.8	2.1
July ..	3	13	0.6	3.1	—	—	—	—
August ..	7	13	1.4	2.5	—	—	—	—
September ..	8	19	1.9	6.0	—	—	—	—
October ..	17	42	3.4	8.1	—	—	—	—
November ..	19	79	3.4	11.7	—	—	—	—
December ..	23	88	5.2	17.9	—	—	—	—

— No figures available

PORT SANITARY

During building, completion or refit of vessels interim inspections are made with particular attention given to requirements for or defective condition of rat-proofing. Little evidence of rodent infestation was found during inspection, either in vessels fitting out or in building berths and such infestation as was found was so slight or confined as to be capable of eradication by baiting or trapping. Inspections during refit afford an opportunity of more thorough examination than is possible when vessels are in commission, especially galleys, pantries, provision stores, refrigerators and cargo spaces used for the carriage of meat, fish, vegetables and other readily contaminated foodstuffs. Where the necessity for repair, renovation or replacement of the structure or equipment was indicated, notice was served on the Master, Chief Officer or Ship's Manager and the necessary work was carried out in every instance.

In Cross-Channel cargo-passenger vessels drinking water storage capacity is considerable. Approximately 50 tons is stored in double bottom tanks isolated by dry cofferdams and as a further precaution against contamination screens and filters are incorporated in the water system. The distribution method throughout these vessels is by gravity from header tanks installed on the boat deck via iron and copper piping. In the older vessels corrosion of the interior surfaces of the piping assists in the retention and growth of deleterious micro-organisms. This is confirmed from the results of samples of drinking water taken in such vessels as compared with those from vessels of more recent construction. In the former contamination is sufficiently pronounced to defy normal chlorination treatment, prolonged concentrated dosage being necessary to obtain satisfactory results. In vessels where the aforementioned conditions exist routine chlorine treatment of the drinking water would prove most effective, with particular emphasis being given at the completion of annual refit to remove any contamination that may have been introduced into the system during tank cleaning and cement washing or overhaul of piping and fittings. This suggested procedure has recently been carried out on the advice of the Port Public Health Inspectors.

A further number of the older coastwise vessels, chiefly colliers, have been taken out of service during the year and their replacement by larger modern vessels embodying improved living, washing, cooking and food storage conditions has resulted in a considerable improvement in the tidiness and cleanliness of quarters, wash-places, mess-rooms and galleys. The methods of construction have also reduced the possibility of vermin infestation.

The reduction in the number of coal burning vessels using the Port continues. With the exception of some colliers, coastwise shipping is mainly motor vessels or oil burners. In a number of vessels having domestic refrigerators of the "built in" type with internal surfaces of a porous nature, soiling from "drip" and other causes was evident despite frequent scalding and washing. The Port Public Health Inspectors suggested coating internal surfaces with white refrigerator paint in order to obtain an impermeable surface and this treatment has proved satisfactory.

Particular attention was given to the importation of considerable quantities of desiccated coconut direct from Ceylon. 92 samples were taken on landing and submitted for bacteriological examination. In no case were intestinal pathogens isolated. During the summer months complaints were received in the Department of growth of algae on tidal land at Helen's Bay. Investigations were carried out by one of the Port Public Health Inspectors at low tide and, while considerable patches of algae did exist there was no offensive odour and it was not necessary to report the matter to the Crown Estate Commissioners.

Five tierces of hog casings, produce of the U.S.A., arrived at the Port ex s.s. Roonagh Head from Chicago without attached official certificate as required by the Public Health (Imported Food) Regulations (N.I.) 1937—1948. The casings were detained and the importer notified in writing that if they were not exported within seven days they would be seized and destroyed. An official certificate issued by the U. S. Department of Agriculture was received covering the goods and they were released for delivery to the consignee.

The Corporation of Belfast as the Sanitary Authority was permanently constituted the Port Sanitary Authority for the Port of Belfast by the Local Government Board (Ireland) Provisional Orders Confirmation (No. 4) Act, 1900.

The expenses of the Port Sanitary Authority are contributed by the Urban and Rural Sanitary Authorities in the following proportions:—

The Corporation of Belfast	..	..	..	92 per cent
The Carrickfergus Urban District Council	..	..	..	1 per cent
The Holywood Urban District Council	..	..	..	1 per cent
The Bangor Borough Council	..	..	..	1 per cent
The Newtownabbey Urban District Council..	..	..	..	1½ per cent
The Castlereagh Rural District Council	..	..	..	1½ per cent
The Larne Rural District Council ..	..	..	..	1 per cent
The North Down Rural District Council	..	..	..	1 per cent

Amount of Shipping entering the port during the year 1960.

TABLE B 22

	Number	Tonnage	Number inspected		Number recorded as defective	Ships on which defects have been remedied	Ships reported as having had, during the voyage, infectious disease on board
			By Medical Officer	By Port Public Health Inspector			
FOREIGN: Steamers } Motors }	834	1,471,342	59	804	154	146	4
COASTWISE: Steamers } Motors }	6,793	4,756,793	14	1,176	89	80	3
TOTAL	7,627	6,228,135	73	1,980	243	226	7

II. Character of trade of port

(a) Passenger traffic (other than coastwise) during the year

TABLE B 23

Passengers	Aliens		British		Total		Refused leave to land
	Forces	Civilians	Forces	Civilians	Forces	Civilians	
Inwards by ship	2	638	—	261	2	899	2
Inwards by aircraft	18	114	—	1,522	18	1,636	—
TOTAL	20	752	—	1,783	20	2,535	2
Outwards by ship Outwards by aircraft							Refused leave to embark
	—	103	—	272	—	375	Nil
	4	165	—	1,454	4	1,619	Nil
TOTAL	4	268	—	1,726	4	1,994	Nil

(b) Cargo traffic:

Principal imports: Maize, wheat, barley, oats, flour, butter, fresh, dried and canned fruits, meat and meat products, tea, sugar, fish, vegetables, eggs (frozen and powder) desiccated coconut, wines, ales, cordials, carobs, grain, offals, cattle, pig and poultry fodder, hides (cured), timber, wood-pulp, paper, flax, hemp, coir, rayon fibre, chemicals, fertilizers, oil, coke, coal, duralumin, tinsplate, steel, cement, building materials, tar, vehicles, tobacco.

Principal exports: Machinery, ropes, twine, linen, thread, tobacco, cigarettes, potatoes, eggs, grass-seed, poultry, fresh fish, shellfish, apples, whiskey, live cattle, sheep, pigs, hides (wet), pork, steel and iron scrap.

(c) Foreign ports from which ships arrived:

Abidjan 1; Abo 2; Abonnema 1; Adelaide 1; Alexandria 2; Almeria 3; Amsterdam 1; Ancona 2
Antwerp 44; Archangel 7; Aruba 1; Aviles 1; Baie Comneau 1; Balbriggan 1; Baltimore 5; Baton
Rouge 3; Bastia 1; Bayonne 3; Bedi Bunder 1; Beirut 1; Beira 6; Bergen 3; Beytown 1; Bilboa 1; Bone
3; Borga 1; Boulogne 2; Bordeaux 1; Bratvaagit 1; Bremen 9; Bridgewater 2; Brisbane 1; Buenos Aires 6;
Burgos 2; Bunbury 2; Burutu 1; Caen 2; Capelle 1; Callao 1; Capetown 17; Cartagena 11; Casablanca 14;
Ceuta 2; Chalna 2; Chicago 1; Churchill 1; Chatham, N.B. 1; Cochin 2; Colombo 3; Cork 10; Curacao
1; Dahouet 1; Dakar 15; Dar-es-Salaam 2; Dalhousie 3; Digby 1; Dieppe 4; Detroit 1; Djibouti 2;
Drammen 4; Drogheda 9; Dublin 69; Dundalk 3; Dun Laoghaire 1; Dunkirk 13; Dunmore East 4; Dun-
garvan 1; Durban 8; East London 1; Etellesbjerg 13; Famagusta 2; Fecamp 3; Fortwilliam 2; Fred-
eriksund 4; Fremantle 6; Freetown 2; Galway 2; Galveston 2; Genoa 4; Georgetown 1; Geraldton 3;
Ghent 35; Gothenburg 5; Grand Bank 1; Greenore 1; Guernsey 39; Haifa 1; Hamina 2; Hamburg 24;
Hango 1; Helsinki 8; Honfleur 2; Huelva 2; Istanbul 1; Izmar 1; Kadiz 1; Kristiansund 1; Kagi 1;
Kalmar 2; Karlskrona 1; Killala 1; Kinsale 1; Kotka 7; Kristianstad 1; Lagos 1; Larvik 1; Las Palmas 1;
Leningrad 2; Letterkenny 2; Le Leque 6; Le Treport 1; Limassol 4; Lisbon 1; Livorno 2; Liepaja 6;
Lobito 1; Lorient 1; Long Beach 1; Los Angeles 1; Madras 3; Malaga 1; Mantyluoto 1; Marseilles 2;
Matadi 1; Melbourne 2; Melilla 1; Milford 1; Mombasa 9; Montreal 32; Mostaganem 13; Naples 2;
Newcastle N. B. 2; Newport News 4; New Orleans 5; New Ross 1; New Westminster 1; New York 1;
Norfolk, Va. 19; Novorossisk 1; Oslo 9; Oran 7; Ostend 1; Palma 1; Pam Bocue 1; Parrsboro, N. S.
1; Patras 2; Phillippeville 4; Piraeus 2; Port Arthur 2; Porto Alegre 1; Port Alfred 3; Port Churchill 1;
Port Louis 1; Port Perry 1; Portland, Or. 1; Port Said 1; Price Rupert 4; Puerto Rico 1; Rangoon 5;
Randers 1; Riga 1; Rijeka 1; Rimouski 2; Rosario 1; Rostock 2; Rotterdam 62; Rouen 21; Ruamo 1;
Salerno 1; Salsbruket 1; Salvador 1; Sapele 1; Sheet Harbour 1; Sherbro 1; Sligo 3; Scernos 1; South

Nelson, N. B. 3; Stralsund 6; St. Brieux 1; St. Johns, N. F. 1; St. John, N. B. 15; St. Malo 1; St. Valery 3; Surabaya 1; Sydney 4; Takoradi 2; Tallin 3; Tanga 1; Tangier 1; Terneuzen 1; Thisted 1; Three Rivers 3; Thyburon 1; Thorshaven 2; Toronto 7; Trequier 2; Trincomalee 2; Tripoli 1; Tuborg 1; Tunis 2; Turku 1; Tuticorin 1; Uddevalla 1; Valkom 1; Vallvik 1; Valencia 6; Vancouver 10; Varberg 1; Vartsaala 2; Ventspils 1; Vikhalmen 1; Walvis Bay 7; Waterford 9; Westport 1; Wexford 1; Wilmington 4; Wismar 7; Whitegate 2; Xypila 2; Zhdanov 1; Zyghi 4.

The nationality of the ships which arrived at the Port and were inspected was as follows:—

British 1,233; Belgian 4; Bulgarian 2; Chinese 1; Danish 37; Dutch 455; Faroese 1; Finnish 1; French 4; German 62; Greek 8; Israeli 3; Italian 9; Lebanese 3; Liberian 18; Norwegian 45; Panamanian 2; Republic of Ireland 18; Russian 11; Spanish 29; Swedish 20; Swiss 1; Union of South Africa 7; Yugoslavian 6.

The Aliens Order 1953 (S. I. 1671/1953)

Under Articles 30 and 33 of the above Order, Dr. W. G. Swann, Dr. J. McA. Taggart, Dr. W. J. McLeod and Dr. A. L. Walby have been appointed by the Ministry of Health and Local Government as Medical Inspectors for the Port of Belfast for the purposes of the Order.

Ships carrying aliens including those granted temporary shore leave.	138 inwards; 47 outwards
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Aircraft carrying Aliens	15 inwards; 15 outwards
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III Water Supply

(a) and (b) for port and shipping:—

The port water supply is obtained from the Belfast City and District Water Commissioners' mains which feed the Belfast Harbour Commissioners' hydrants on quayside. Vessels are supplied from quayside hydrants by the use of meter/standpipes and hoses under the control of the B. W. C.

(c) Water boats:—

There are no waterboats at the port.

Water Sampling

45 samples of drinking water were taken on board vessels and submitted to the Public Health Laboratory for bacteriological examination. 30 of these samples were reported as highly satisfactory and 15 samples as unsatisfactory due to the presence of coliform organisms which in 9 cases were of faecal origin. Where analysis revealed contamination the ships' water tanks, pumps and systems were thoroughly cleansed, flushed and chlorinated with effective results in every case.

IV. Public Health (Ships) Regulations (Northern Ireland), 1954

1. Arrangements for dealing with Declaration of Health forms:—

Declaration of Health forms as recommended by the Association of Sea and Air Port Health Authorities of the British Isles are in use at the port. Special instructions relative to the Port of Belfast are given on the fourth page and a supply of these forms is distributed to H.M. Customs Officers and the Belfast Harbour Commissioners for the use of the Pilotage service.

A Declaration of Health form signed by the master and countersigned by the ship's surgeon (where one is carried) is received from each ship arriving at the port from a foreign port. The Declaration of Health Form is received by the Customs Officer or the Port Public Health Inspector on the arrival of the ship. The answers to the questions contained in the Declaration are scrutinised and supplementary questions asked.

In cases where the Customs Officer first boards the ship and the Declaration of Health is satisfactory, pratique is granted. If the Declaration of Health is not satisfactory, the circumstances are immediately reported to the Port Medical Officer, who makes investigations before passengers or crew are allowed to land.

Ships arriving at the port are required to display the appropriate quarantine signals as laid down in the regulations.

2. Boarding of Ships on arrival:—

All ships arriving from a foreign port are boarded on arrival by an officer of H.M. Customs and an officer of the Port Sanitary Authority.

3. Notification to the Authority of inward ships requiring special attention (Wireless messages, land signal stations, information from pilots, Customs Officers, etc.):—

Arrangements for the transmission of wireless messages from inward bound ships requiring special attention under the Regulations have been made with the various shipping companies and agents in Belfast. Under the arrangements the shipping companies receive the wireless message required under Regulation 13 and forward the information to the Port Medical Officer.

Alternatively, or in addition, wireless messages are received direct by the Port Sanitary Authority, the telegraphic address "Portelth, Belfast" having been registered for this purpose. (Regulation 14 (1) and (2)).

No land signalling system is in operation.

Close co-operation exists between the Port Sanitary Authority and the Officers of H.M. Customs and notifications of ships requiring special attention are received from the latter.

4. Mooring stations designated under Regulations 22 to 30:—

With the concurrence of H.M. Customs and the Belfast Harbour Commissioners, the ordinary places of mooring, discharge or loading have been designated mooring stations in relation to inward ships from foreign ports.

5. Experience of working of Regulation 18: restriction on boarding or leaving ships:—

In carrying out the provisions of this Regulation during the year no difficulty arose and it was not necessary to require passengers to furnish names and destinations, etc., as there was no case of infectious disease on board any ship arriving at the port which required this procedure.

6. Arrangements made for:—

Regulation 5 (c) (i): premises or waiting rooms for medical inspection:—

There are at present no premises set apart as a Customs examination hall, waiting rooms or rooms for medical inspection of passengers, as there are no direct passenger sailings between this port and foreign ports. Passengers who arrive by direct cargo ships from foreign ports are examined, if necessary, on board the particular ship.

Regulation 5 (e) (ii): premises for temporary isolation of persons as required by the Regulations:—

None provided.

Regulation 5 (c) (iii): Cleansing, disinfecting or disinfestation of ships, persons or clothing:—

After the removal of a case or cases of infectious disease, disinfection of the ships is carried out by the Port Public Health Inspectors. Clothing and other effects are removed to the Health Committee's Disinfecting Station, Laganbank Road, where they are subjected to steam pressure disinfection. The cleansing of persons is also carried out at this station at which suitable facilities have been provided for this purpose.

Regulation 5 (d): arrangements for reception into hospital of persons as required by the Regulations:—

The Northern Ireland Hospitals Authority make provision for the reception of cases of infectious diseases at the Northern Ireland Fever Hospital at Purdysburn. Separate premises situated in the hospital grounds, but self contained and isolated from the other hospital buildings, are available for the reception of cases of smallpox.

Regulation 5 (e): ambulance transport:—The port makes use of the facilities provided for ambulance transport in the City by the N. I. Hospitals Authority.

Regulation 5 (f): supervision of contacts:—When contacts of infectious disease are members of the crew they are kept under supervision by the Port Medical Officer. In the case of passengers or crew landing, their destinations are ascertained. Should they proceed to a place outside Belfast, the Medical Officer of the relevant district is notified.

No notification regarding contacts of infectious diseases was received from other Sea and Airport Health Authorities during the year.

7. Arrangements for bacteriological or pathological examination of rats for plague:—

Bacteriological and pathological examination of rats for plague is carried out by arrangement with the Director of Laboratory Services, Northern Ireland Hospitals Authority.

8. Arrangements for other bacteriological and pathological examinations:—

All other bacteriological and pathological examinations are carried out by arrangement with the Director of Laboratory Services, Northern Ireland Hospitals Authority.

9. Arrangements for the diagnosis and treatment of Venereal Diseases among sailors under international agreement:—

Upon the arrival of ships in the port, information is given to the master as to arrangements for the diagnosis and treatment of venereal disease amongst sailors. Pamphlets are left on board which give the location and time of V. D. Clinics. The pamphlets give warning of the danger of the disease. Every encouragement is given for attendance at the following clinics:—

The Royal Victoria Hospital
The Mater Infirmorum Hospital

When continuation of treatment at other ports is necessary, the sailor's Form V.44 is filled in by the Medical Officer in charge of the V.D. clinic, giving full particulars of the treatment received by the sailor.

The Belfast Harbour Commissioners have permitted the permanent display of posters issued by the Health Department containing similar warning and information regarding treatment centres in the dock side lavatories and urinals.

10. Arrangements for interment of the dead:—

All arrangements for the interment of the dead are attended to by the shipping companies.

Cases of infectious sickness landed from ships (including coastwise ships)

TABLE B 24

Disease	Cases during 1960		Ships concerned	Average cases for previous five years
	Passengers	Crew		
Tuberculosis	5	1	4	7
Erysipelas	—	1	1	—

Cases of infectious sickness occurring on ships during the voyage but disposed of prior to arrival

TABLE B 25

Disease	Cases during 1960		Ships concerned	Average cases for previous five years
	Passengers	Crew		
Poliomyelitis	—	1	1	—
Chicken Pox	2	—	1	1
Malaria	—	1	1	1

No cases of plague, cholera, yellow fever, smallpox, typhus fever or relapsing fever occurred, and no plague-infected rats were discovered during the year.

V. Measures against rodents

1. Steps taken for detection of rodent plague:—

In ships in port:—All ships arriving from ports where plague is endemic are boarded by the Port Public Health Inspector as soon as possible after berthing. Enquiries are made as to the prevalence of rats on board, and as to whether any sick or dead rats were found during the voyage. The ships are then inspected to ascertain the degree of rat infestation, and are periodically inspected during the time they remain in port in order to ascertain if any dead rats have been found in the cargo.

2. Measures taken to prevent the passage of rats between ship and shore:—

All ships arriving from foreign ports are required to affix rat-guards to all moorings and maintain them so affixed during the time they are in port. It is also recommended that the gangway or other communication with the shore should be raised at least eighteen inches from the ground.

3. Methods of deratting in ships:—

(a) Eradication measures in a vessel are influenced by the extent and location of the infestation. Where such is slight and confined, trapping and warfarin baiting will suffice. In other cases fumigation with hydrogen cyanide is resorted to. The latter is carried out by authorized contractors and in accordance with the provisions of the Hydrogen Cyanide (Fumigation of Ships) Regulations (Northern Ireland) 1952 and under the supervision of the Port Public Health Inspectors.

(b) Premises in the vicinity of docks, quays, etc:—Sheds, wharves, roads and open spaces in the Belfast Harbour Commissioners' Estate receive routine warfarin baiting. Occupiers of premises within the Estate readily accede to requests for provision of rodent repressive treatment at their premises, where necessary. When necessary a written notice under the Rats and Mice (Destruction) Act, 1919 is issued and served on the occupiers of the premises concerned.

4. Measures taken for detection of rats in ships and on shore:—

(a) In ships:—Vessels arriving in the port are inspected by the Port Public Health Inspectors who ascertain whether or not they are infested with rats.

(b) On shore:—Sheds, stores, other buildings and structures also timber stacks and open spaces receive continual inspection.

5. Rat proofing:—

(a) Extent to which docks, wharves, warehouses, etc., are ratproof:—

The quayside of docks and basins in the port are mainly of solid granite construction with ferro-concrete or granite sett surfacing.

In the case of jetties, wharves and quay extensions, some rat harbourage does exist in the under-jetty piling and frame work also in the stone facing of the river bank but the rat passage from one to the other is restricted by the sound construction of quayside surfacing. The use of concrete and/or granite setts laid on concrete in the construction of roads and shed floors ensures effective rat proofing in sheds and other dockside buildings.

(b) Action to extend ratproofing:—

(1) In ships:—Efforts are directed towards restricting free movement in vessels and preventing access to such attractive spaces as bilges for water, under ceilings, sheathing or casing for nesting and food stores. The use of tight fitting steel doors, sheet metal and expanded fine-mesh metal assures perfect protection.

(2) On Shore:—Dock side premises receive inspection to ensure that they are maintained in sound condition against the entry and harbourage of rodents also that material favourable to harbourage and feeding is not permitted to accumulate.

Most owners and occupiers of premises in the Port area are fully aware of the damage to merchandise caused by rodents and adopt all practicable measures to prevent their entry.

Number of rats destroyed during year.

(1) On Ships:—

TABLE B 26

Species	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black	6	—	2	—	—	6	2	1	2	—	—	2	21
Brown	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: In addition to the above, 52 mice were destroyed.

(2) In docks, quays, wharves, warehouses: —

TABLE B 27

Species	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black.. ..	1	—	—	2	—	3	—	4	—	—	3	—	13
Brown	2	4	3	5	7	3	4	2	—	2	3	3	38

In addition to the above 89 mice were destroyed. The number of rats destroyed, as recorded in above table, were only those which came to the notice of the Port Public Health Inspectors.

Measures of rat destruction on plague “infected” or “suspected” ships or ships from plague-infected ports arriving during the year:—

No plague “infected” or “suspected” ships arrived in the Port of Belfast during the year.

Deratting Certificates and Deratting Exemption Certificates issued during the year

TABLE B 28

Net Tonnage	Ships	Deratting Certificates Issued					Exemption Certificates Issued
		After Fumigation with			After Trapping, Poisoning, etc.	Total	
		HCN	Sulphur	HCN and Sulphur			
Up to 300 tons	10	—	—	—	—	—	10
From 301 tons to 1,000 tons ..	29	—	—	—	—	—	29
From 1,001 to 3,000 tons ..	19	—	—	—	—	—	19
From 3,001 to 10,000 tons ..	23	—	—	—	—	—	23
Over 10,000 tons	4	2	—	—	—	2	2
TOTALS	85	2	—	—	—	2	83

12 Vessels, where infestation was slight, were serviced by trapping and baiting.

VI. Hygiene of crews spaces:

Classification of nuisances:—

TABLE B 29

Nationality of Ship	Inspected during 1960	Defects of original construction	Structural defects through wear and tear	Dirt, vermin, and other conditions prejudicial to health
British	1,233	—	220	373
Other Nationalities	747	—	19	81

The defects found consisted of:—

TABLE B 30

	British	Other Nationalities
Defects due to wear and tear:		
Bilge limbers	4	—
Butcher's block	2	—
Ceilings	1	—
Canopy	1	—
Coffee and water boilers	2	—
Decks	31	7
Deck-head insulation	9	—
Drinking water filters	2	—
Flue pipes to stoves	12	1
Galley stoves	22	—
Heating system	3	—
Portlights	31	4
Refrigerators	19	4
Scupper pipes	10	—
Shower fittings	2	—
Slop chute	1	—
Service pipe	2	1
Soil discharges (W.C. and urinals)	11	—
Skylight	1	—
Splashbacks	1	—
Tables	2	—
Tiling	5	—
Urinal flushing valves	2	—
Ventilators	3	—
Ventilation system overhauled	5	—
Waste discharges	9	1
Wash basins	6	—
W.C. basins	8	—
W.C. flushing valves	9	1
W.C. joints	1	—
W.C. seats	1	—
Wheel-house roof	1	—
Wooden pallets	2	—
Other Conditions:		
Bedding required cleansing	1	—
Bilges required cleansing	35	4
Bilges required painting	15	—
Dock-side nuisance (soil discharge from ships)	21	11
Domestic refrigerators required cleansing	16	2
Domestic refrigerators required painting	16	2
Food lockers required cleansing	6	—
Food lockers required painting	6	—
Passenger accommodation required painting	8	—
Quarters, washplaces, messrooms, storerooms, galleys and alleyways re- quired cleansing	37	6
Quarters, washplaces, messrooms, storerooms, galleys and alleyways re- quired painting	55	5
Refuse on deck	5	2
Scuppers required cleansing	30	2
Sullage tanks required cleansing	2	—
Swill bins required	7	7
Tanks required cleansing	34	7
Tanks required painting	11	—
Vermin; bugs, beetles, cockroaches, weevils, etc.	50	21
Water closet compartments required cleansing	12	6
Water closet compartments required painting	6	6
TOTALS	593	100

VII. Food inspection:

(1) Action taken under the Public Health (Imported Food) Regulations 1937-1948, the Public Health (Imported Milk) Regulations 1926, and the Public Health (Preservatives, etc., in Food) Regulations 1927-1953.

During the year all sheds and warehouses where food is landed or stored were inspected regularly for the detection of unsound food.

Unsound food seized or surrendered:—

TABLE B 31

Description	Cwts.	Qrs.	Lbs.
Apricot Pulp	9	—	22
Apricot in Water	18	2	19
Biscuits	—	3	26
Breakfast Cereals	3	2	8
Broken Pineapple Pieces in Syrup	—	3	4
Butter	—	2	—
Cherries in Water	7	3	2
Cornflour	—	3	6
Flour	4	—	—
Ice Cream Powder	—	—	7
Leeks	1	1	20
Marrowfat Peas	1	—	—
Mixed Fruit Drops	—	—	24
Parsley	10	3	—
Pear Halves in Syrup	—	—	4
Peach Halves in Water	5	2	—
Pineapple Chunks in Syrup	—	—	13
Peeled Tomatoes	—	—	11
Onions	4	—	—
Sliced Peaches in Syrup	1	2	6

The following informal samples taken under the above Regulations were submitted to the Public Analyst for chemical and bacteriological analysis:—

Chicken noodle soup 1; Chutney 1; Corned beef 1; Desiccated coconut 92; flour 5; Lemon Sponge Mix 1; Minced Chicken 1; Orange Sponge Mix 1; Pearl Barley 1; Pickled Beetroot 1; Potted Salmon 1; Prawns 1; Raw Sugar 1; Rice 1; Sugar 1.

No milk was imported.

(2) **Shellfish:—information respecting any shellfish beds or layings within the area under the jurisdiction of the Port Sanitary Authority, stating whether they are, in the opinion of the Port Medical Officer, liable to pollution:—**

There are no layings of shellfish within the area under the jurisdiction of the Port Sanitary Authority.

Report of any action under the Public Health (Shellfish) N. I. Regulations 1936 or the Food and Drugs Act (Northern Ireland) 1958:—

Under the Belfast Corporation Act 1930, it is an offence to gather any shellfish within the area under the jurisdiction of the Port Sanitary Authority. Posters are exhibited in the vicinity of the Port area during the summer months warning the public against the gathering of shellfish.

Smoke observation of ships' funnels:—Number of observations made during the year—80 (each of 30 minutes' duration). Number observed discharging black smoke over 2 minutes in a continuous period of 30 minutes—6. Number of Statutory Notices served—3. Verbal notice was given to 19 masters, chief engineers and ships' managers regarding the volume of dark smoke being emitted.

Routine and other inspections not included in main report:—

833 visits to cross-channel (passenger) ships.

434 re-inspections regarding defects, etc.

124 inspections regarding deratting and deratting exemption certificates.

FACTORIES

The Factories Acts (Northern Ireland) 1938 to 1959 (which repealed and consolidated the old Factory and Workshops Acts) are the principal enactments in Northern Ireland for the protection of the health and welfare of the persons employed in factories and ensure, as far as practicable, that the workrooms in factories and the machinery contained therein are maintained in a hygienic and safe condition. The term factory is defined in the Act of 1938, supplemented by the Act of 1949, and covers all manufacturing establishments and a wide field of workplaces where persons are employed by way of trade for the purposes of gain and includes, under certain conditions, warehouses, which normally are regarded as outside the scope of the Factories Acts.

The main Act of 1938 is divided into twelve parts containing 162 Sections and 3 Schedules and the Local Authority within its own boundary is responsible for the administration under Part 1, Section 7, together with the Factories (Sanitary Accommodation) Regulations (Northern Ireland) 1939, made thereunder with respect to the provision of suitable and sufficient sanitary arrangements in all types of factories; Sections 1 to 8 (except for the provision of lighting) in non-power factories with respect to the cleanliness of workrooms, the overcrowding of workrooms, the securing and the maintenance of a reasonable temperature in all parts of the factory where persons are employed, the adequate ventilation of workrooms and provision for rendering harmless, so far as practicable, all fumes, dust and other impurities that may be considered injurious to the health of the persons employed; for the proper drainage of floors where any wet process is carried on in the factory and requiring the Local Authority to keep a Register of all factories situated within their district.

Under Part 2 of the Act the Local Authority is responsible for the administration of Section 35 with respect to the provision of escape in the case of fire in factories and for the safety Regulations made thereunder; under Part 3 of the Act (Welfare) Section 42 regarding the approval of a pure and wholesome supply of water for drinking purposes; under Part 4 (Health, Safety and Welfare special provisions and Regulations) Section 55 with respect to basement bakehouses, the issue or withdrawal under certain circumstances of Certificates of Suitability and the special conditions for sanitary and unsanitary bakehouses; Section 56 with respect to the Regulations for, and the cleanliness of bakehouses; Section 58 regarding the precautions to be taken as to sleeping places near bakehouses. Under Part 7 of the Act, Sections 111 and 112 with respect to the provision of suitable sanitary arrangements in works of building construction or of works of engineering construction. Under Part 8 (Homework) Sections 114 to 117 concerning the conditions under which home work may be carried on; the keeping of a register of outworkers, the employment of persons in unwholesome premises, the making of wearing apparel where there is scarlet fever or smallpox and the prohibition of all kinds of homework in places where there are any of the scheduled infectious diseases; under Part 12 of the Act concerning offences, penalties and legal proceedings.

The Factories Act (Northern Ireland) 1949, extends the powers, amends certain Sections and makes additional provisions to the principal Act of 1938.

The following tables give details of the work carried out during the year 1960 in connection with the Factories Acts (Northern Ireland), 1938 to 1959.

Inspections for Health Provisions of the Factories Acts

TABLE B 32

PREMISES	Inspections	Notices issued	Occupiers prosecuted
Factories with mechanical power	3,295	75	1
Factories without mechanical power	165	23	5
*Other premises under the Act (including works of building and engineering construction, but not including outworkers' premises) ..	880	49	2
TOTALS	4,340	147	8

*Electrical stations reckoned as factories.

Conditions Found

TABLE B 33

PARTICULARS	Instances	Remedied	Referred to Chief Factory Inspector	Prosecutions instituted	Outstanding
Want of cleanliness (S.1)	8	5	2	3	2
Overcrowding (S.2)	1	1	1	—	—
Unreasonable temperature (S.3)	2	2	2	—	—
Inadequate ventilation (S.4)	6	6	1	—	2
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary conveniences (S.7):					
Insufficient	20	19	—	2	4
Unsuitable or Defective	350	357	—	1	41
Not separate for sexes	5	4	—	1	3
Other Offences (excluding offences relating to Homework which are reported in Table B 34)	69	40	21	—	13
Breaches of special sanitary requirements for bakehouses (S.56 to S.59)	2	2	—	—	—
TOTALS	463	436*	27	7	65

* Defects remedied include defects outstanding from previous year

There is also a statutory duty imposed on the Local Authority under the Public Health Acts to inspect their district for public health nuisances and contraventions of the Local Acts and By-Laws and for that purpose, in addition to the work outlined in the above tables, surveys are made of the office accommodation attached to factories (which is outside the provisions of the Factories Act (Northern Ireland) 1938) and these are included in the tables under the heading "Non Industrial Premises".

Public health nuisances discovered during the inspections of factories were dealt with under the provisions of the Public Health (Ireland) Acts 1878—1946 and the Belfast Corporation Acts, 1845 to 1956, details of which are as follows:—

Inspections of Factories and Workplaces under the Public Health (Ireland) Acts 1878 to 1946 and the Belfast Corporation Acts 1845 to 1956

Nuisances discovered	145
Statutory notices issued	87
Nuisances abated	81
Dangerous structures, risk of fire, etc. reported to the City Surveyor for action	4
Special reports to the City Surveyor under the Planning Acts	43
Plans examined concerning new work and alterations	86

Factory Outworkers (Homework)

Factories which manufacture bed linen, table linen, handkerchiefs, etc. and carry out work connected with the cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel often send such articles to the homes of former employees or other experienced persons for finishing, hemstitching, smoothing, etc., and under Part 8 of the Factories Act (Northern Ireland) 1938, Sections 114 to 117, it is the duty of the Local Authority to see that this work is carried on in homes free from infectious disease and under reasonably hygienic conditions, consequently it is necessary each day to examine the notifications of infectious disease and to make periodical visits to the homes.

Under the same Part of the Factories Act it is the duty of the Local Authority to keep a register of Outworkers premises and for that purpose notifications are sent by the Department to factories employing such labour twice each year in the months of February and August, reminding them of

their obligations under the Act to send the names and addresses of outworkers and the particular type of outwork carried on. Notifications of outworkers who reside outside the City Boundary are passed on to the Local Authority within whose area the work is carried on.

When a case of infectious disease occurs in an outworker's premises, or when work is being carried on in unwholesome premises, a notice is sent to the owner or occupier of the factory employing such person, prohibiting the sending of further work until the house or part thereof liable to be infected is disinfected to the satisfaction of the Department, or other reasonable precautions have been adopted. The notice also prohibits the removal of any work from the house in which a case of infectious disease has occurred until it has been disinfected by an officer of the Health Department.

The following table gives details of the work carried out in this connection:—

Inspection of Outworkers' Premises

TABLE B 34

Nature of Work	Inspections	Unwholesome premises (Section 115)			Infected premises (Sections 116/117)		
		Instances	Statutory notices served	Prose- cutions	Instances	Orders made	Prosecutions
1. Making, cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel ..	16	—	—	—	—	—	—
2. Making-up, ornamenting, finishing and repairing of table linen, or other house- hold linen (including in the term "linen" articles of cotton and linen mixtures)	381	3	3	—	3	2	—
3. Textile weaving and any process incidental thereto	2	—	—	—	—	—	—
4. Others	—	—	—	—	—	—	—
TOTALS	399	3	3	—	3	2	—

Outworkers' premises within the City, notified during the year	..	637
Notices sent to factories employing outworkers .. ..	..	91
Notices for failing to keep or send lists of outworkers .. ..	..	8
Outworkers' returns received .. ..	..	909
Outworkers notified from other districts .. ..	..	5
Outworkers notified to districts outside the City .. ..	..	272

Bakehouses

The modernisation and improvement of bakehouses in the City continued during the year; considerable structural works were carried out in some of the larger bakeries together with the installation of up-to-date plant and machinery which has resulted in an improvement in food hygiene generally. Most of the old draw-plate and coke ovens, which filled the air in bakehouses with dust and fumes, destroying decorative conditions and causing the overheating of workrooms, have been replaced with modern enclosed travelling ovens heated by gas, oil or electricity making for much cleaner conditions all round. During the year a medium sized bakery owned by a progressive firm completed the modernisation of an old building taken over about a year ago and this is noteworthy from the aspect of what can be achieved without re-building. The lay out of entrances, food storage rooms, mixing rooms, preparation baking and decoration departments is designed to prevent overlapping and wasted effort; all food rooms make for hygiene, embodying the most modern and easily cleansed surfaces on the walls, floors and ceilings and provided with the maximum amount of natural lighting and ventilation. The plant and machinery provides for the minimum of handling of foodstuffs by employees. The employees work under excellent bright conditions including controlled temperatures, spacious canteen facilities, shower baths, changing rooms and lockers; they are trained in hygiene and, in addition

to the wearing of white drill clothing, are provided with the latest type of head gear made from strong white texture paper fitted with head adjustment which overcomes the old prejudice of wearing head covering; the caps are light, attractive and easily disposable. The bakery has also adopted the new disposable paper sacks for waste collection. These wet-strength paper sacks are fitted to metal holders with a plastic lid; when full they are simply removed, closed and taken for disposal, cutting out the old metal dustbin which can become dirty, evil smelling and hard to cleanse properly.

The provisions of the Factories Act (Northern Ireland) 1938 relating to cleanliness, overcrowding, temperature, ventilation, drainage of floors, sanitary conveniences etc. in factories are also applicable to bakeries in addition to the special sections dealing with the control of "unsanitary" and "basement" bakehouses, but these provisions are directed more to the protection of the health of the workers employed and do not include the protection of the public with regard to the soundness or otherwise of foodstuffs, the hygiene practices of employees in the preparation of food and the proper storage of foodstuffs generally, which are regulated by the Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948.

Table B 35 gives particulars of the conditions in bakehouses and the action taken by the Department.

Bakehouses on register at 1st January, 1960	..	..	..	219
Inspections made during the year	..	..	..	942

Conditions discovered during the year.

TABLE B 35

Nature of Defects	Instances	Notices served	Remedied	Out-standing
Want of cleanliness in food rooms	28	16	22	8
Cleanliness of persons handling foodstuffs not observed	6	5	6	—
Unreasonable temperature (or ventilation inadequate or not being maintained)	5	2	7	1
Inadequate provision for rendering fumes, etc., harmless	4	2	4	2
Inadequate provision for drainage of floors	—	—	—	—
Drain inlets within food rooms	6	4	6	2
Sanitary conveniences communicating directly with food rooms	2	2	2	—
Ceilings, walls, floors, doors, etc., in disrepair	17	9	16	11
Ceilings, walls, floors, doors, windows, etc., required cleansing	23	16	19	7
Preparation or cooking rooms structurally defective	6	4	10	5
Suitable and sufficient washing facilities not provided	3	1	5	2
Suitable cloakroom accommodation not provided	3	2	2	2
Cleanliness of utensils, machinery, benches, etc., not observed	16	9	14	2
Suitable and sufficient lighting not provided or not maintained	10	5	7	3
Preparation rooms overcrowded	1	1	1	—
Other defects	12	4	10	9
TOTALS	142	82	131*	54

* Defects remedied include defects outstanding from the previous year.

During the year it was found necessary in sixteen instances to institute legal proceedings against occupiers and owners of bakehouses and persons concerned in the importation, preparation, storage and distribution of food intended for sale of human consumption for breaches of the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland), 1948 and the Public Health (Ireland) Acts, 1878 to 1946, details of which are as follows:—

- (a) Failing to observe due cleanliness of the rooms, benches, tables and machinery where food was prepared and stored for the purposes of sale for human consumption.
- (b) Failing to take all reasonable precautions to prevent contamination of food by insects, dirt, dust, animals or otherwise during the distribution of food for human consumption.
- (c) Having sold food containing foreign matter which rendered the food unfit for human consumption.

Insanitary Bakehouses

During the year three bakery premises were found in such a state by reason of defective structural conditions as to render them unfit for the preparation of food under the provisions of the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland) 1948 and on representation

by the Department the premises ceased to be used for that purpose. Seventeen new bakeries were established during the year under the supervision of Public Health Inspectors and three new bake-houses were in course of construction or modernization at the end of the year.

Bread Delivery Vehicles

The inspection of bread delivery vehicles and food containers for cleanliness and defective conditions likely to cause breaches of the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland) 1948, continued during the year. Spot checks of bread delivery vans were made both in the bakeries and on the street and only in two instances was it found necessary to issue warnings.

During the bread strike in 1960 when all the larger City bakeries were closed down there was a period of about three weeks when large quantities of bread were brought into the City from other areas not affected by the strike. The bread was brought into the City in open motor vans, private vans and cars. In most instances it was unwrapped and often little or no attention was given to food hygiene either in storage or by the persons handling the bread. During that period the Health Department had Inspectors patrolling the areas where the bread was being sold, giving advice on hygienic handling. Although the Department was fully conscious of the difficulties involved and made allowances for conditions which would not be countenanced in normal times, it was found necessary to seize quantities of bread which had become contaminated and have it destroyed on Magistrates' Orders and in seven instances institute legal proceedings against persons selling bread to the public for failing to take all reasonable precautions to prevent contamination of the bread by dirt, dust or otherwise. In all seven cases the Courts convicted and fined the persons concerned.

Bread Shops

Bread Shops on register at 1st January, 1960	290
Inspections during the year	..	..	..	701

Conditions discovered during the year

TABLE B 36

Nature of Defects	Instances	Notices served	Remedied	Out-standing
Want of cleanliness in food rooms	3	1	3	—
Want of cleanliness of persons handling foodstuffs	1	1	1	—
Unreasonable temperature (ventilation inadequate or not being maintained)	2	1	3	1
Drain inlets within food rooms	1	1	1	—
Sanitary conveniences communicating directly with food rooms	—	—	—	—
Ceilings, walls, floors, windows, doors, etc., in disrepair ..	—	—	4	—
Ceilings, walls, floors, windows, doors, etc., required cleansing	8	4	8	—
Suitable and sufficient washing facilities not provided ..	1	1	1	1
Cleanliness of utensils, benches, food containers, etc., not observed	—	—	—	—
Suitable and sufficient lighting not provided or maintained ..	—	—	—	—
Other defects	41	35	40	7
Totals	57	44	61*	9

* Defects remedied include defects outstanding from the previous year.

Betting and Lotteries Act (Northern Ireland) 1957

Under the Betting and Lotteries Act (Northern Ireland) 1957 one hundred and thirteen "Notices of intention" were received by the Belfast Corporation during the year. Under the Act the occupier of a bookmaking establishment must give notice to the Local Authority in whose area he intends to carry on business, by advertisement in the local newspapers and by notification to the Town Clerk, of his intention to apply to the Courts for a Certificate that his premises are suitable for the carrying on of a bookmaker's business. Inspections are carried out by the Health Department and reports made in each case to the Town Solicitor; the inspections are carried out under the provisions of the Public Health and Local Acts for such contraventions as overcrowded conditions in offices, cleanliness, sufficiency of natural lighting and ventilation in offices where persons are employed, structural defects of floors, walls, stairways, damp conditions and the provision of suitable and sufficient sanitary accommodation, washing facilities and drinking facilities.

Where conditions are found which would be considered likely to be injurious or prejudicial to the health of the employees, a special report is made to the Health Committee who authorise the Town Solicitor to give notice in writing, at least seven days before the hearing of the case by the Courts, of the intention of the Corporation to object to the grant of a Certificate of Suitability and setting out the reasons for the objection. Attendances are made in Court and evidence given during the hearing and it is to be recorded that the Courts upheld the objections in every case either by refusing to grant a Certificate, or withholding the application till the specified works were carried out or by the applicant giving an undertaking that the premises would be put in order to the satisfaction of the Department within a reasonable time.

As reported last year a considerable number of unlicenced bookmakers are still carrying on business in the City pending appeals to the House of Lords; against the Betting and Lotteries legislation some of these premises are most unsuitable and for the greater part require extensive alterations but until a decision is given no action can be taken under the Acts to effect improvements.

The following summary concerning bookmakers' offices in the City in connection with the Betting and Lotteries Act (N.I.) 1957, does not include inspections by Public Health Inspectors nor particulars of the improvements carried out in such premises as the result of action taken under the Public Health and Local Acts as these are included under the heading of "Non-Industrial Premises".

1.	Number of bookmaker's offices operating in the City	136
2.	Number of applications made to the Courts for certificates of suitability	116
3.	Number of applications adjourned from last year and still pending decision of the Courts	27
4.	Number of Certificates of suitability granted	108
5.	Number of Certificates of suitability refused	4
6.	Number of notices of intention to object to the grant of certificates on public health grounds	20
7.	Number of undertakings given to the Courts that the premises would be altered to comply with public health requirements ..	9
8.	Number of appeals pending the Recorder's decision against refusals from the lower Court.	3
9.	Number of bookmakers' offices closed as the result of inability to comply with public health requirements	1

Non-Industrial Premises

Office buildings inspected	488
Office suites inspected	541
Inspections during the year	737

TABLE B 37

Nature of conditions	Instances	Remedied	Out-standing
Offices overcrowded	9	10	11
Offices inadequately ventilated	7	6	21
Offices inadequately lighted	4	4	24
Offices inadequately heated	2	1	2
Offices dirty	3	3	2
Stairways and passages dirty	3	3	1
Offices, etc., requiring re-decoration	5	4	3
Offices not free from noxious fumes	1	1	—
Offices in a damp state	12	10	5
Offices in a defective condition	14	10	5
Unsuitable provision for taking of meals	—	—	—
Unsuitable or no drinking water	3	2	7
Unsuitable or no washing facilities	4	2	8
Other Defects	10	10	26
<i>Sanitary accommodation—</i>			
Insufficient	3	3	9
Not separate for the sexes	1	1	—
Dirty state	5	5	1
No intervening ventilated spaces, screening, etc.	1	1	3
Defective conditions, etc.	12	13	9
Unsuitable urinals	2	2	10
Separate means of approach not provided	1	1	1
TOTALS	102	92*	148

* Defects remedied include defects outstanding from the previous year.

Medicines, Pharmacy and Poisons Acts (Northern Ireland), 1925 to 1955

Under the Medicines, Pharmacy and Poisons Acts (Northern Ireland), 1925 to 1955, all shops and traders engaged in the sale of Poisons included in Part II of the Poisons Schedule must make application each year, to the Local Authority in whose area the business is carried on, for registration under the Act and the Regulations made thereunder, although a registered shopkeeper may store and sell to the public all or any of the preparations contained in Part II of the Poisons Schedule. The Inspectors find that there are two types of traders: (1) The shopkeeper engaged mainly in the horticultural business who sells arsenic, nicotine, formaldehyde, phenols, etc., used in sheep dips, seed and bulb dressings, sanitary fluids, insecticide dusting powders, horticultural spray, etc., preparations and (2) The ordinary shopkeeper with the mixed business who sells the more common household preparations like ammonia for household cleaning, carbolic disinfectants, caustic soda, certain types of hair dyes, preparations for paint removing, etc.

The Local Authority is required to prepare and maintain a register of all persons selling Part II poisons in their area. A notice is sent to each trader whose name appears on the register at least 21 days before, informing him of the impending expiration of the registration, together with an application for renewal and particulars of the fees involved. On receipt of an application the premises are visited by an Inspector who ascertains if the provisions of the Poisons Acts and Regulations are being complied with and a written report is made to the Health Committee who authorise the registration or otherwise.

The following summary gives particulars of the work carried out during the year:—

Inspections	486
Applications for registration	385
Reports to Health Committee	383
Premises registered	380
Refusal of registration on grounds of unsuitability	3
Contraventions of the Regulations discovered	7

As the result of traders closing down business, changes of type of business, etc., twelve names were removed from the register during 1960. In one application for registration which was refused by the Health Committee, poisons included in the schedule were sold from a carrier cycle in various

districts inside and outside the City boundary and in two other instances we found carbolic disinfectants and ammonia being bottled in discarded cordial bottles, sauce bottles and wine bottles; although the bottles were labelled "Poison" in accordance with the Regulations it is considered a very dangerous practice to have poisons in containers normally associated with harmless food products; these matters were reported to the Pharmaceutical Inspector of the Ministry of Home Affairs.

Rag Flock Act 1911

Normal routine inspections are made during the year in factories manufacturing bedding, upholstery goods and furniture, under the Factories Acts for cleanliness etc. Under the Rag Flock Act of 1911 and the Rag Flock Regulations, 1912, the Local Authority is required to visit such premises where rag flock is kept for the purpose of sale or use in making articles of upholstery, bedding, etc. and to examine and take samples of such flock for the purposes of analysis. The Act requires the Local Authority to appoint an authorised officer for this purpose, gives power of entry to the appointed officer and authorises the taking of legal proceedings. Rag Flock is defined by the Act as being material which has been produced wholly or partly by tearing up woven or knitted materials, whether old or new, and the Regulations made under the Act specify the standard of cleanliness for rag flock.

One of the samples taken during the year did not conform to the standard of cleanliness and was the subject of legal proceedings against the occupier of the premises from which the sample was procured; the defendant pleaded "warranty" before the Courts and the Magistrate convicted and imposed a fine on the manufacturer of the rag flock.

The following is a summary of the work carried on during the year in connection with the above Act and the Regulations:—

Premises on Register where rag flock is used	..	..	..	38
Inspections of premises	..	..	..	50
Samples of rag flock submitted to Public Analyst	..	..	..	35
Samples certified as not being in compliance with the Rag Flock Regulations, 1912	..	..	..	1
Cautionary letters sent	..	..	..	Nil
Prosecutions instituted	..	..	..	1

Shops Act (Northern Ireland) 1946

The following are details of the work carried out during the year in the administration of the Shops Act (Northern Ireland) 1946:—

Number of shops on the register	..	..	..	..	6,871
Complete surveys made during the year	..	..	..	..	1,487
Inspections during the year	..	..	..	..	4,526
Contraventions discovered	..	..	..	..	252
Statutory notices served	..	..	..	..	131
Exemption certificates issued since 1946 with respect to alternative sanitary accommodation	..	..	..	..	27
Exemption certificates issued since 1946 with respect to washing facilities					17
Summonses issued during the year	..	..	..	..	Nil
Number of applications for exemption refused by the Health Committee with respect to sanitary accommodation or washing facilities	..				Nil

TABLE B 38

Nature of conditions	Instances	Remedied	Out-standing
Suitable and sufficient ventilation not provided	2	4	1
Suitable and sufficient ventilation not maintained	3	4	1
Efficient means for securing a reasonable temperature not provided	4	5	2
Suitable temperature not maintained	3	2	1
Suitable and sufficient means of lighting not provided or maintained	—	—	—
Insufficient and unsuitable washing facilities	24	32	9
Unsuitable facilities for the taking of meals	—	—	—
<i>Sanitary Accommodation—</i>			
Insufficient	6	6	3
Not provided separately for sexes	4	3	2
Ventilation inadequate	23	16	10
Lighting inadequate	8	9	2
Floors, walls, basins, seats, cisterns, etc., defective or dirty	158	150	44
Screening, doors, fasteners, etc., defective or not provided	7	7	2
Absence of an intervening ventilated space	15	12	6
Separate means of approach not provided	2	3	1
TOTALS	259	253*	84

* Defects remedied include defects outstanding from previous year.

Inspection of shops under the Public Health (Ireland) Acts 1878 to 1946

During the surveys made of shops by the officers appointed under the Shops Act (Northern Ireland) 1946, it is also the practice to inspect the premises for contraventions of the Public Health (Ireland) Acts, 1878 to 1946 and the local By-Laws made under these Acts for such conditions as defective floors, stairways, and landings, damp conditions likely to be injurious to the health of employees, etc. and the necessary statutory notices served and followed up until abated. Complaints made direct to the Department of the existence of public health nuisances and those received from the District Public Health Inspectors are dealt with in a similar manner by the Shops Officers.

Inspection of shops under the Public Health (Ireland) Acts, 1878 to 1946

Public Health nuisances discovered during the year	65
Statutory notices served	62
Nuisances abated	59
Notices outstanding at 31st December, 1960	6

Fabrics (Misdescription) Act, 1913 and the Fabrics (Misdescription) Regulations (Northern Ireland) 1959

The Fabrics (Misdescription) Act, 1913, is designed to protect the public against any false description that articles of clothing or fabrics are fire proof or fire resistant.

The Act itself is a short one making it unlawful for any person to sell, or expose, or have in his possession for sale any textile fabric either in the piece or made up into garments to which is attributed the term "non-inflammability," or safety from fire either by marking on the material or by verbal representation at the time of sale unless such textile fabric conform to the standard of non-inflammability prescribed by the Regulations.

The Regulations prescribe two standards; one to which fabrics must conform if they are described in terms which suggest that they are non-inflammable and a lower, but nevertheless stringent, standard to which all textile fabrics for which some degree of non-inflammability is claimed must conform.

Fabrics claimed to be non-inflammable without qualification must pass the tests set out in B.S. 3120 (material for flame proof clothing), which ensure that if the fabric catches alight the flame will quickly extinguish itself, i.e., the flame will die out in eight seconds and the length of the char will not be greater than 4½ inches.

Fabrics sold with qualifications as to their resistance to fire and described as "of low flammability" or "fire resistant" etc. must pass the second standard of B.S. 3121 (fabrics of low flammability) which ensure that a flame will take not less than 150 seconds to travel 100 inches up a vertical strip of fabric.

In both tests standard washing treatments are prescribed to which fabrics must be submitted before the final burning tests are carried out; the washing tests are to ensure that as far as possible the fabrics will retain their fire resistant properties throughout useful life.

Section 5 of the Act requires every Local Authority to enforce the provisions of the Act within its district and for that purpose any officer whom the Local Authority may appoint shall have power to institute proceedings. During the year 1960 the City Council decided that the provisions of the Act and the new Regulations made thereunder would be administered by the Health Department.

It was found that although publicity was given to the large number of accidents and the loss of life in homes and factories as the result of clothing catching fire and the great danger to children and old people, shopkeepers in the City were slow and hesitant to keep stocks of flame resistant fabrics until there was more demand by the public and a resultant drop in price of such materials. As a result only two samples were procured during the year, both of which were certified by the Textile Testing Department as being in compliance with the standards prescribed by the Regulations.

FOOD AND DRUGS

The Medical Officer of Health is responsible for ensuring the safety of food supplies and the Sanitary Officers specially qualified in food sampling are responsible for carrying out the routine duties to implement the legal requirements. This entails the constant vigilance of the Inspectors who procure samples of foodstuffs and drugs and submit them to the Public Analyst whose duty it is to test for adulteration or impurities. Appropriate action is taken in cases where samples are found not to be genuine.

On the 16th May, 1960, the new Food and Drugs Act (Northern Ireland), 1958, came into operation. The object of the Act is primarily to promote health. It provides for the following:—

- (a) To ensure that food in its various stages of production, preparation, storage and distribution for sale is fit for human consumption.
- (b) To ensure that food sold is of the required composition and that the public are protected against adulteration, misleading claims or false descriptions of food.

The Act consolidates the provisions of some 30 Statutes and introduces some important amendments to meet changing conditions. Further references are made to the Act in other sections of this report. This section deals only with the provisions of the Act in relation to sampling to check the nature, substance or quality of food sold within the City. The Food and Drugs Inspectors are authorised officers under the Act and are given power to purchase samples of food or in certain instances to take samples without payment. This wider power is useful because there are many circumstances in which purchase by the sampling officer is not always possible, e.g., food in transit, in store, or on sale by wholesale only, or where the vendor cannot be found.

During the year ended 31st December, 1960, the Food Inspectors purchased 1,414 samples; 23 of these samples were reported by the Public Analyst as not being genuine and not of the nature, substance or quality demanded by the purchaser. This gives a percentage adulteration figure of 1.63 which compares with the adulterations in 1959. Of the 23 adulterations found 13 consisted of the misuse of preservatives in minced beef, sausages and sausage meat. This figure shows an improvement on previous years and it is hoped that this decline in numbers is indicative of greater care being exercised in the use of preservatives. The other 10 adulterations found were butter and buttermilk with excess water, bread and margarine sold as bread and butter, sweetmilk deficient in milk fat, olive oil deficient in vitamins, camphorated oil deficient in camphor and jam not having the statutory percentage of soluble solids.

Having regard to all the information available it was considered necessary to institute legal proceedings in 20 instances of adulteration. The Courts imposed fines amounting to a total of £62 in convictions for contraventions of the standards prescribed for those foods. The following table shows the number of samples procured and examined in the past five years and the percentage of adulterated samples:

TABLE B 39

Year	Number taken			Number adulterated			Percentage adulterated		
	Formal	Informal	Total	Formal	Informal	Total	Formal	Informal	Total
1956	1,400	3	1,403	53	1	54	3.79	33.33	3.85
1957	1,398	9	1,407	52	2	54	3.72	22.22	3.84
1958	1,376	10	1,386	28	7	35	2.03	70.00	2.53
1959	1,401	5	1,406	23	1	24	1.64	20.00	1.71
1960	1,410	4	1,414	23	—	23	1.63	—	1.63

Description of samples of food and drugs analysed.

TABLE B 40

Article	Number analysed	Article	Number analysed
Advocaat	1	Drink, orange	1
Ale, brown	1	Dripping	2
Ale, pale	1	Ducks, savoury	1
Almonds, ground	4	Essence, coffee and chicory	15
Arrowroot	3	Essence of rennet	2
Balsam of linseed horehound and honey	1	Essence, vanilla	1
Barley	8	Ether, sweet spirit of nitrous (B.P.C.) ..	1
Beef, minced	48	Fat, cooking	20
Beef, minced with gravy	1	Fat, vegetable	1
Beef steak with gravy	2	Farola	8
Beer	4	Figs, syrup of	4
Beer, tonic	1	Flour	1
Beverage, food	1	Flour, self raising	3
Beverage, glucose	1	Food, Milo	1
Bisto	1	Foods, Parrish's	2
Brandy	4	Fruit	6
Bread and butter	9	Fruit, dried	16
Browning	1	Gelatine, powdered	1
Butter	43	Gin	3
Butter, brandy	1	Ginger	2
Buttermilk	25	Ginger, ground	1
Butter and scones	1	Glucose	1
Cake covering, chocolate	1	Glycerine	2
Capsules, cod liver oil	1	Glycerine, lemon and honey	1
Capsules, vitamin and mineral	1	Gum, ball	1
Cheese	3	Gum, chewing	2
Cherries, glace	4	Hash, corned beef	1
Chocolate	1	Ham, pressed	1
Chocolate, drinking	3	Herbs, mixed	1
Chutney	2	Honey	7
Chutney, Mango	1	Ice-cream	87
Cider	1	Jam	10
Cinnamon	1	Jelly, table	12
Cinnamon, ground	3	Juice, fruit and syrups	18
Cockles	1	Ketchup	2
Cocoa	2	Ketchup, tomato	4
Complan	1	Lard	5
Condiment, non-brewed	20	Lentils	5
Confectionery	4	Linctus	1
Cordials	1	Linctus, cherry	1
Cornflour	3	Linctus, Gee's (B.P.C.)	1
Coconut, dessicated	3	Lollipops	21
Codeine, linctus of	1	Macaroni	1
Coffee	2	Magnesia, milk of	3
Cream	8	Margarine	30
Cream, double devon	1	Marzipan	2
Cream, salad	2	Marmalade	3
Cream, sterilized	4	Mayonnaise	2
Cream, whipping	1	Meat, casserole with gravy	1
Cream, zinc and castor oil	1	Meat, luncheon	4
Crystals, foam	3	Milk, condensed	1
Crystals, lemon	1	Milk, evaporated	2
Curd, lemon	6	Milk, full cream condensed	1
Dressing, fish	1	Milk, full cream evaporated	1
Drink, glucose	1	Mince meat, sweet	5
		Mint in vinegar	1

TABLE B 40 (continued)

Article	Number analysed	Article	Number analysed
Mix, broth	2	Sauce	10
Mix, cake	2	Sauce, white	2
Mix, milk shakes	1	Sausages and sausage meat	235
Mix, soda bread	1	Seed, caraway	3
Mixture, cough	2	Semolina	7
Mustard	4	Shake, with syrup	1
Oil, camphorated	2	Sherry	5
Oil, castor	2	Sherry, cream	1
Oil, cod liver	1	Soda, bicarbonate of	11
Oil, cooking	1	Soda water	1
Oil, corn	2	Soft drinks	38
Oil, groundnut	1	Soup and soup mix	37
Oil, olive	7	Spaghetti	1
Oil, salad	1	Spice, mixed	4
Ointment, boric acid (B.P.)	2	Spice, pickling	1
Ointment, sulphur (B.P.)	1	Spread, salmon	3
Ointment, zinc	1	Spread, sandwich	1
Paraffin, liquid	3	Steak, beef with gravy	1
Paste, fish	1	Steak minced	68
Paste, meat	6	Steak, minced with gravy	2
Pastry, fish cream	1	Steak, stewed in gravy	2
Peas	3	Stout, tonic	1
Peas, dried	1	Stuffing, sage and onion	1
Peel	2	Suet, beef	1
Peel, mixed	1	Suet, shredded	4
Pepper	9	Suet, shredded beef	4
Pepper, white	1	Sugar, brown	1
Piccalilli	1	Sugar, demerara	1
Pickles	1	Sweetmilk	196
Pie, devon lamb	1	Syrup, cough	1
Pie, steak and kidney	4	Syrup, glucose	1
Pilchards	1	Syrup, rose-hip	1
Powder, baking	2	Tablets	1
Powder, curry	3	Tablets, aspirin (B.P.)	2
Powder, custard	5	Tablets, codeine (B.P.)	1
Powder, lemonade	5	Tartar, cream of	5
Pudding, black	3	Tea	11
Pudding, tapioca	1	Tea, instant	3
Puree, tomato	1	Veal, jellied	1
Quinine tincture, ammoniated	1	Vegetables, dried	1
Rice	5	Vegetables, mixed	1
Rice, ground	2	Vinegar	4
Rissoles	1	Vinegar, cider	1
Rissoles, ham and chicken	1	Vinegar, cider with honey	1
Roll, steak and onion	1	Vinegar, malt	13
Rum	1	Vinegar, raspberry flavour	1
Saccharine	1	Vodka	1
Sago	1	Whip, miracle	3
Salad cream	2	Whiskey	13
Salt, Fynnon	2	Wine, ginger	1
Salt, Epsom	3	Wine, port	1
Salt, fruit	1	Wine, tonic	1
Salt, Glauber	2	Yeast tablets, brewer's	3
Salt, liver	1	Yorkshire Relish	3
Sandwich, dairy cream sponge	1		
Sandwich, fresh cream sponge	1		
		Total	1,414

Legal proceedings in respect of adulterated foods

TABLE B 41

Nature of sample	No. of samples taken	Adulterations	Prosecutions	Convictions	Fines
Beef, minced	48	6	6	6	£23 0 0
Bread and butter	9	1	—	—	—
Butter	43	1	1	1	£3 0 0
Buttermilk	25	1	1	1	£3 0 0
Butter and scones	1	1	1	1	£2 0 0
Jam	10	2	2	2	£1 0 0
Oil, camphorated	2	1	1	1	£5 0 0
Oil, cod liver	1	1	1	—	—
Sausages and sausage meat	235	4	3	3	£15 0 0
Steak, minced	68	3	3	3	£8 0 0
Sweetmilk	196	2	1	1	£2 0 0

Cases of adulteration in which no legal proceedings were instituted, but the owner was cautioned:—

Sausage meat 1; bread and butter 1; sweetmilk 1.

Particulars of samples specially reported by the Public Analyst during the year:—

Apples. Four samples of American apples specially examined for arsenic spray residues were found to be free, or nearly free, from arsenic.

Beef Sausages. Two samples of beef sausages contained respectively 800 and 2,300 parts per million of sulphur dioxide as a preservative. Beef sausages may contain 450 parts per million of sulphur dioxide when declared in accordance with the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927.

Bread and butter and Scones and butter. A sample of bread and butter and a sample of scones and butter both contained margarine instead of butter.

Butter. One sample of butter contained 21.0 per cent of moisture. According to the Sale of Butter Regulations the moisture content of butter should not exceed 16.0 per cent.

Buttermilk. One sample of buttermilk contained 9.9 parts of water in excess of the 25 parts allowed.

Camphorated oil. One sample of camphorated oil was low in content of camphor. Camphorated oil is required by the British Pharmacopoeia to contain not less than 19 per cent of camphor. Only 16 per cent was present in this product.

Cod liver oil. One sample of cod liver oil contained 423 units of vitamin A activity per gramme. The British Pharmacopoeia requires cod liver oil to contain, per gramme, not less than 600 units of vitamin A activity.

Gooseberry jam. One sample of gooseberry jam had a soluble solid content of only 56.0 per cent whereas 68.5 per cent is the recognised minimum.

Ice-cream. One sample of ice-cream containing 4.9 per cent of fat was returned as inferior. Ice-cream is required by the Sale of Ice-Cream (N.I.) Regulations to contain at least 5.0 per cent of fat.

Malt vinegar. One sample of malt vinegar contained mucilaginous matter derived from acetic acid bacteria and was returned as inferior.

Minced beef. Four samples of minced beef contained respectively 90, 270, 290 and 570 parts per million of sulphur dioxide. Minced beef according to the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927, must not contain preservatives. One sample of minced beef contained 240 parts per million of sulphur dioxide and also 6 per cent of starchy matter. One sample of minced beef showing evidence of the presence of a trace of sulphur dioxide was returned as inferior.

Minced meat. One sample of minced meat contained 1,700 parts per million of sulphur dioxide. Minced meat, according to the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927, must not contain preservatives.

Minced steak. Three samples of minced steak contained respectively 300, 450 and 500 parts per million of sulphur dioxide. Minced steak according to the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927, must not contain preservatives.

Miracle whip. One sample was in a separated condition with a clear top oil layer and gummy coagulated solids below. Otherwise the composition was chemically normal.

Sausage meat. One sample of sausage meat contained 570 parts per million of sulphur dioxide. Sausage meat may contain a maximum of 450 parts per million of sulphur dioxide, when declared (Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927). One sample labelled sausage meat had the composition of minced beef containing 99.9 per cent of meat and only 0.1 per cent of starchy matter and was not therefore a genuine sample of sausage meat.

Strawberry jam. One sample of strawberry jam contained only 60.0 per cent of soluble solids against the 68.5 per cent required to be present in jams.

Sweetmilk. Two samples of sweetmilk were deficient in milk fat, containing 2.2 and 2.8 per cent respectively and below the "presumptive" minimum of 3.0 per cent.

Sweet spirits of nitre. One sample of sweet spirits of nitre was slightly low in ethyl nitrate and was returned as inferior.

Wheat flour. Five samples of white wheat flour were found to be of normal composition.

Milk Control

Several sections of the Food and Drugs Act (Northern Ireland) 1958 deal with milk and in order that the statutory functions of the Health Authority are performed, the Food Inspectors carry out regular routine sampling of milk for chemical analysis and bacteriological and biological examination. Simultaneously with sampling, inspections are made of the premises in the City in which milk is produced, processed, distributed or sold. The new Act makes it an offence to adulterate milk or to deal in adulterated milk. This enables Health Authorities to deal with adulterated milk as a specific offence instead of having to resort to the general provisions dealing with food not of the nature, substance and quality as defined in previous Food and Drugs Acts.

Licensed producers of milk	..	..	..	..	..	6
Cows on licensed producers' premises (average)	..	..	..	..	..	92
Dairies where milk is pasteurised	..	..	..	..	..	4
Gallons of milk pasteurised per day (approx.)	..	..	..	..	..	45,400
Wholesale distributors of milk	..	..	..	..	..	27
Retail distributors of pasteurised milk	..	..	..	..	..	1,196
Retail distributors of grade A (T.T.) milk	..	..	..	..	..	32
Inspections of dairies, cowsheds and milkshops	..	..	..	..	..	722
Samples of sweet milk taken under Food and Drugs Act	..	..	..	..	..	196

Particulars of sweetmilk samples taken for chemical analysis during the five years 1956—1960

For several years it has been possible to comment favourably on the quality of the milk sold within the City. Fat content of milk samples has generally been well above the percentage standard required by Regulations and useful data is provided for the argument that the fat content of milk required by Regulations is too low. The two samples shown as adulterated in Table B 42 were procured as part of meals in restaurants.

TABLE B 42

Year	Number taken	Number adulterated	Percentage adulterated
1956	168	1	0.60
1957	143	—	—
1958	167	—	—
1959	159	—	—
1960	196	2	1.02

Average monthly composition of milk samples submitted and examined by the Public Analyst

TABLE B 43

Month				Number	Total solids per cent	Fat per cent	Solids not fat per cent
January	..	..	..	5	12.42	3.66	8.76
February	..	..	..	9	12.20	3.57	8.63
March	..	..	..	17	12.27	3.66	8.61
April	..	..	..	18	12.11	3.50	8.61
May	..	..	..	12	11.97	3.32	8.65
June	..	..	..	9	12.06	3.44	8.62
July	..	..	..	7	12.41	3.75	8.66
August	..	..	..	6	12.33	3.66	8.67
September	..	..	..	15	12.46	3.72	8.74
October	..	..	..	26	12.38	3.68	8.70
November	..	..	..	58	12.45	3.80	8.65
December	..	..	..	14	12.29	3.57	8.72

Bacteriological and Biological examination of Milk

A total of 1,000 samples of grade A (T.T.) and pasteurised milk were purchased by the Food and Drugs Inspectors for bacteriological examination. The examinations were carried out at the Central Laboratory of the Northern Ireland Hospitals Authority. The samples were collected in accordance with the conditions prescribed in Statutory Rules and Orders (Northern Ireland) 1951 No. 189 and were examined by the Bacteriologist as to compliance with the bacteriological standards prescribed by the Regulations. Where adverse results were reported by the Bacteriologist the Inspectors inspected the premises as to methods and conditions of production, processing, storage and sale as the case may be. There was a considerable improvement in the results of the coliform test as applied to grade A (T.T.) milk as compared with the results in 1959, but there was an increase in the number of unsatisfactory results as applied to pasteurised milk. In instances where unsatisfactory results were reported the Food Inspectors investigated the likely sources of contamination where the premises were situated inside the City Boundary; in others the matter was referred to the appropriate authority.

In addition 161 sample of grade A (T.T.) milk were forwarded to the Pathological Laboratory, Purdysburn, for biological examination as to the presence of tubercle bacilli.

Particulars of Bacteriological and Biological Examinations of Milk

TABLE B 44

Test	Grade of Milk	Samples Examined	Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate Count ..	"A" (TT)	99	98	98.99	1	1.01
	Pasteurised	—	—	—	—	—
Coliform ..	"A" (TT)	99	85	85.86	14	14.14
	Pasteurised	901	830	92.12	71	7.88
Phosphatase ..	Pasteurised	901	901	100.00	—	—
Biological ..	"A" (TT)	161	161	100.00	—	—

Provision of Milk in Schools

During the year 161 samples of milk delivered to schools were taken by Food Inspectors for bacteriological examination. 132 samples were in compliance and 29 samples were unsatisfactory due to the presence of coliform organisms. In addition to investigations carried out by the Food Inspectors in instances where unsatisfactory results were received, the Director of Education was also notified.

Bacteriological Examination of School Milk

TABLE B 45

Test	Grade of Milk	Samples Examined	Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate Count ..	Pasteurised	—	—	—	—	—
Coliform ..	Pasteurised	161	132	81.99	29	18.01
Phosphatase ..	Pasteurised	161	161	100.00	—	—

Mineral Waters

351 samples of mineral waters were submitted for bacteriological examination and 38 samples for chemical analysis. 348 of the samples were reported as highly satisfactory bacteriologically and all of the 38 chemical samples were reported as genuine. In the three instances where unsatisfactory results were reported, investigations were carried out by Food Inspectors and remedial measures taken.

Frozen Confectionery

The number of unsatisfactory results obtained as seen in Table B 46 is still too high. Further mechanisation and the elimination of human handling in the manufacturing process is still being investigated and it is hoped that difficulties in the design of suitable plant will be overcome.

TABLE B 46

Number examined	Number satisfactory	Number unsatisfactory because of the presence of coliform organisms	Number unsatisfactory because of the presence of coliform organisms of faecal origin
231	207	24	4

Bacteriological Examination of Imported Eggs, Egg Powder and Egg Albumen

Number of samples taken for examination	91
Samples of frozen eggs	66
Samples of dried eggs	22
Samples of egg albumen	3
Number of samples in which S. aberdeen were isolated	1

There was a considerable improvement in the number of satisfactory samples compared with 1959. In the one instance when salmonella organisms were found during the year, the consignment of dried eggs was seized and an order for its condemnation and destruction was granted by a Resident Magistrate.

Merchandise Marks Acts, 1887 to 1953

Merchandise Marks (Imported Goods) Orders, made under Section 2 of the Merchandise Marks Act, 1926

During the year the Food Inspectors found it necessary to give verbal warnings in 106 instances for contraventions of the various orders made under the Act of 1926. Varied excuses are generally offered as reasons for non-compliance. Subsequent checking of the premises always follows verbal warnings. In no instance was it found necessary to resort to legal proceedings. It is always impressed on traders that the law requires the general public to be informed of the country of origin of imported goods and notices require to be exhibited conspicuously with that information.

Margarine Factors and Wholesale Dealers

Number of premises on the register	79
Number of inspections of registered premises	59
Number of contraventions discovered and remedied	4

Citrus Fruits

Samples of citrus fruit were submitted to the Public Analyst as to compliance with prescribed standards of diphenyl or ortho-phenylphenol or mixtures of the two substances. The standards are prescribed in the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927, as amended by Statutory Rules and Orders (Northern Ireland) 1958, No. 161. All samples taken during the year were found to be in compliance with the Regulations.

The Control of Food unfit for Human consumption

The Food and Drugs Act (Northern Ireland) 1958, altered the legislation dealing with food unfit for human consumption. The phrase "unsound, unwholesome and unfit for the food of man" has now been superseded by a simple statement "unfit for human consumption". It is now also possible to deal with food which is not actually sold, such as that given away as prizes or as part of an advertising campaign, etc.

Comment has been made in previous Annual Reports on the increasing volume of food unfit for human consumption which is voluntarily surrendered for condemnation and destruction. During 1960 the trend continued and over 7,000 condemnation certificates were issued. The tables which follow show the variety of foods dealt with during the year. Tinned hams would appear to be the most vulnerable to damage and susceptible to changes of temperature, etc. During 1960 the Food Inspectors had to deal with approximately three times as many tinned hams as in the previous year. This commodity is expensive when condemned and represents a great monetary loss to manufacturers. The need for a thorough investigation into the methods of processing, packing, transit and storage is obvious. The large amount of baby foods destroyed was the result of fire damage. Tables B 48 (a and b) show the amount of food which, because of the circumstances existing at the time of examination, had to be seized formally and brought before a Resident Magistrate to obtain Orders for condemnation and destruction. The food containing extraneous matter brought to the Department shows the same pattern as in previous years, metals, moulds, maggots, etc., being most evident.

Unsound foodstuffs surrendered by traders after inspection and destroyed or disposed of otherwise than for the food of man

TABLE B 47 (a)

Articles	Tins, jars, packets, cartons, bottles	Articles	Tins, jars, packets, cartons, bottles
Asparagus	75	Milk	1,225
Baby food	2,790	Miscellaneous	142
Baking powder	3	Molasses	72
Barley	34	Mustard	9
Beans	2,896	Paste	119
Beetroot	106	Peas	2,859
Biscuit wafers and cones	72	Pickles	812
Cereals	17	Potato crisps	20
Cheese	205	Puddings	501
Coffee	107	Rice	624
Corn	66	Salad cream	13
Cream	141	Sandwich spread	1
Fish	1,386	Soup and broth	5,523
Frozen foods	2,626	Spaghetti	322
Fruit	12,571	Stew	125
Fruit juice	1,296	Syrup	277
Ham	514	Tomatoes	1,464
Jam	236	Tomato juice	193
Jellies	17	Treacle	1
Macaroni	13	Vegetables	988
Marmalade	304	Vegetable juice	10
Meat, brawn, veal and pork	3,399		

TABLE B 47 (b)

Articles	Tons	Cwt.	Qrs.	Lbs.	Articles	Tons	Cwt.	Qrs.	Lbs.
Beans	—	5	3	16	Ham	6	9	2	13
Butter	—	—	—	$\frac{1}{2}$	Margarine	—	—	2	4
Cheese	—	3	2	15	Meat, brawn, veal and				
Confectionery	—	5	3	18	pork	4	4	—	14
Cooking fat	—	—	2	26	Oats	—	2	—	—
Dried fruit	—	13	—	4	Peas	—	19	1	27
Fruit	4	2	2	3	Rice	—	1	2	27
Fruit pulp.. ..	1	5	—	13	Tomato puree	—	—	3	18
					Suet	—	—	—	9

7,074 Certificates were issued during the year.

Unsound food seized and destroyed in pursuance of Magistrates' Orders

TABLE B 48 (a)

Articles	No.	Container	Articles	No.	Container
Barley	1	packet	Lentils	4	packets
Cereals	2	packets	Miscellaneous	30	packets
Confectionery	176	packets	Soup	4	packets
Jam	1	pot			

20 Fowl, 2 Pies, 47 Eggs, 65 Oranges, 1 Melon, 1 Pig's knee, 1 Bottle of lemonade, 2 Sponge cakes, 3 Gallons buttermilk, 4 Doz. Pastry, 1 Pint of cochineal.

TABLE B 48 (b)

Articles	Cwt.	Qrs.	Lbs.	Articles	Cwt.	Qrs.	Lbs.
Baking powder	—	—	14	Liver	2	3	20
Butter	—	—	$16\frac{1}{2}$	Milk powder	—	—	24
Cooking fat	—	1	$4\frac{1}{2}$	Margarine	—	—	$24\frac{1}{2}$
Dried egg mixture	—	3	2	Salt	—	—	7
Flour	—	2	14	Sugar	—	—	2
Fruit	1	2	11	Tea	—	—	$5\frac{1}{4}$
Fruit (dried)	—	—	14				
Ham	—	3	21				
Jam	—	—	$10\frac{1}{2}$				

Food containing extraneous matter

The following complaints received from the public of the presence of extraneous matter in food were dealt with by the Department during the year.

- *Dirt on bread (6 loaves)
- Mould in jar of steak and kidney paste
- *Piece of metal in chocolate
- Black matter in peas
- Maggot in smoked haddock
- Mould in bread (6 loaves)
- Bacteriological growth in malt vinegar (2 bottles)
- Hair clip in bread
- *Piece of wire in fruit scone
- Live maggot in box of chocolates
- Foreign matter in grapefruit squash
- *Foreign matter in portion of bread
- *Nail in chocolate cream pastry
- Rat droppings in plain scone
- *Human hair in fruit scones
- Mice droppings in bread. (1 loaf)
- Sponge cake with offensive odour
- *Insect in coconut ring pastry
- *Rancid cream in cream sponge cakes
- Discoloured matter and carbon in bread. (3 loaves)
- *Mould growth in brown bread. (1 loaf)

* Denotes legal proceedings taken

Ice Cream

Sale of Food and Drugs Act (Northern Ireland) 1958

With the coming into operation of the Food and Drugs Act (Northern Ireland) 1958, on 16th May, 1960, all matters affecting registration for ice cream are now dealt with under the Act. The number of registered premises was substantially increased during the year as compared with 1959, and a record figure of 999 registrations has now been reached. There was a small decrease in the numbers registered for manufacture and sale of ice cream. The decrease was brought about by some of the small manufacturers ceasing to manufacture in favour of purchasing ice-cream from other sources. Those traders affected were subsequently re-registered for sale only. The chemical composition of ice cream samples continued to be well up to standard. All the 87 samples procured during the year were reported as genuine by the Public Analyst. 944 samples were taken for bacteriological examination and submitted to the Central Laboratory of the Northern Ireland Hospitals Authority. There was some deterioration in the results of the Methylene Blue tests as applied to the ice-cream. This was shown by an increase in the numbers classified as Grades 3 and 4. Samples coming within these grades are regarded as having been subjected to contamination at some stage during manufacture, distribution, storage or sale. The Food Inspectors investigated all such instances and advised on measures to be taken to improve results.

Sale of Ice-cream

Registration of premises used for manufacture for sale, and sale of Ice-Cream.

TABLE B 49

Particulars	Manufacture	Manufacture and Sale	Sale Only	Vending Machines	Storage	Total
Premises registered at 1st January, 1960	—	44	911	—	—	955
Deletions during the year ..	—	6	82	—	—	88
Registrations during the year ..	1	2	122	6	1	132
On register at 31st December, 1960 ..	1	40	951	6	1	999

Inspections of registered premises	2,312
Summonses for selling ice cream in unregistered premises	7
Samples submitted for bacteriological examination	944
Samples submitted for chemical analysis	87
Cautionary letters sent	47
Orders made refusing or cancelling registration	8

Particulars of ice-cream samples taken during the year for chemical analysis

TABLE B 50

Complied with standards		Did not comply with standards			
Number	%	Fat		Total Solids	
		Number	%	Number	%
87	100	—	—	—	—

The Ice Cream (Heat Treatment, etc.) Regulations (N.I.) 1954
Methylene Blue test (944 samples)

TABLE B 51

Grade			Number	Percentage
1	..	..	805	85.28
2	..	..	92	9.74
3	..	..	24	2.54
4	..	..	23	2.44

Conditions discovered on inspection of ice-cream premises

TABLE B 52

Nature of conditions							Instances	Remedied	In progress	Out standing
Walls, ceilings, floors, etc. in disrepair .. .. .	..	..	..	..	..	..	2	1	3	—
Lighting and ventilation not provided or insufficient .. ..	..	..	..	..	..	..	2	2	—	—
Sink defective, worn or not provided .. .. .	..	..	..	..	..	..	1	1	1	1
Sink, hot and cold water not provided or insufficient .. ..	..	..	..	..	..	..	2	2	1	—
Sink, wastepipe untrapped or connected direct to the drain ..	..	..	..	..	..	..	1	1	1	—
Personal washing facilities not provided or insufficient .. ..	..	..	..	..	..	..	2	2	1	—
Soap and towels not provided or insufficient .. .. .	..	..	..	..	..	..	1	1	—	—
Failure to prevent risk of contamination of food .. .. .	..	..	..	..	..	..	4	4	—	—
Yards, paving, walls etc., defective .. .. .	..	..	..	..	..	..	1	1	—	—
Other defects .. .. .	..	..	..	..	..	..	—	2	—	—
TOTALS .. .. .	..	..	..	..	..	..	16	17*	7	—

* Defects remedied include defects outstanding from the previous year

The Food and Drugs Act (Northern Ireland) 1958, give the Ministry of Health and Local Government powers to make Regulations as to Food Hygiene and within the provisions of the Act, Regulations can be made for securing sanitary and clean conditions and practices in the production, preparation, storage, sale and distribution of food. At the end of the year no new Food Hygiene Regulations had been made by the Ministry but it is anticipated that some new Regulations will be introduced in the near future to deal with mobile traders and other aspects of food hygiene not covered by existing legislation. Large scale reconstructions of many food premises were carried out and more supermarkets were opened. This type of store selling a wide variety of goods combining nearly all divisions of the food trade is now an established feature of the business life of the community. To operate successfully on the self-service principle and to avoid excessive customer handling of food, particularly perishable foods, with the attendant dangers, is one of the difficult problems associated with this type of trading. To meet such situations more and more foodstuffs are being prepacked and a greater use is being made of refrigerated display cabinets. It is now possible to obtain a wide range of meat, meat products, pork, bacon, fish, poultry, etc. in prepacked containers and in certain instances even a fully prepared and cooked meal is obtainable.

Notwithstanding all the progress made in raising and maintaining a high standard of food hygiene there are still the black spots in which, despite verbal warnings and written notices, nothing short of legal proceedings has any effect. The Food Inspectors during the year gave 209 verbal warnings for breaches of the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland) 1948; 14 verbal warnings for contraventions of the Shops Act (Northern Ireland) 1946, and 7 verbal warnings for nuisances under the Public Health (Ireland) Acts 1875 to 1946, and by-laws made thereunder. In those instances where verbal warnings or written notices were of no avail, 22 summonses were subsequently issued for breaches of the Public Health (Prevention of Contamination of Food) Regulations, 1948, 1 for contravention of the Shops Act (Northern Ireland) 1946, and 1 under the Rats and Mice Destruction Act, 1919, (for failing to take all necessary steps for the destruction of vermin in food premises). The courts imposed fines in these cases amounting to over £51. The Food Inspectors maintain surveillance over food premises and endeavour to have the necessary improvements and works carried out.

Details of plans showing proposed alterations to food premises

During the year 87 plans were submitted, for perusal and comment, showing proposed alterations to or reconstruction of various types of food premises as below:—

Licensed premises	..	..	..	..	..	..	23
Food stores	..	..	..	..	..	..	5
Grocers	..	..	..	..	..	..	12
Cafes and restaurants	..	..	..	..	..	..	9
Fruit wholesalers	..	..	..	..	..	..	1
Supermarkets	..	..	..	..	..	..	5
Multiple stores	..	..	..	..	..	..	1
School kitchens	..	..	..	..	..	..	7
Works canteens	..	..	..	..	..	..	2
Institutions	..	..	..	..	..	..	1
Hotels	..	..	..	..	..	..	2
Butchers	..	..	..	..	..	..	8
Fish and chips	..	..	..	..	..	..	2
Clubs	..	..	..	..	..	..	1
Dairies	..	..	..	..	..	..	1
Ice-cream premises	..	..	..	..	..	..	1
Bottling stores	..	..	..	..	..	..	1
Confectioners	..	..	..	..	..	..	5
							87

Inspection of food premises

Inspections by trade or business (excluding bakehouses)

TABLE B 53

Trade or business	Inspections	Trade or business	Inspections
Bacon curing stores	36	Markets	506
Bottling stores	9	Meat factories	4
Butchers	1,625	Milk retailers	722
Chemists	43	Mineral water factories	198
Cold Stores	6	Poulterers	520
Confectionery	3,578	Provisions	1,226
Fish	231	Pastry	34
Fish and Chips	585	Public houses	477
Food manufacturers	108	Restaurants	491
Fruiterers	1,508	Wholesale stores	594
Grocers	4,785		
Hawkers' carts	238		
Ice-cream	2,312		
Industrial canteens	20		

Total 19,856

Butchers' premises

Premises registered at 1st January, 1960	364
Deleted during year	25
Registered during year	34
Premises registered at 31st December, 1960	373
Inspections of registered premises	1,625

Belfast Corporation Act, 1930 and the Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948 Conditions discovered on inspection of butchers' premises

TABLE B 54

Nature of condition	Instances	Remedied	In progress	Out-standing
Walls, ceilings, floors, doors, etc., in disrepair	8	21	20	15
Walls, ceilings, floors, windows, doors, etc., required cleansing or re-decoration	2	—	2	—
Lighting and ventilation not provided or insufficient	1	3	2	2
Sink: wastepipe untrapped or connected direct to drain	—	2	—	4
Sink: hot and cold water not provided or insufficient	—	4	2	2
Fixtures and fittings in a state of disrepair	—	2	—	—
Drain inlets within a food room	—	2	1	2
Failure to prevent risk of contamination of food	—	1	1	—
Cold storage facilities not provided	—	1	1	—
Cold storage improperly sited	—	—	—	1
Equipment worn or defective: required repair or renewal	—	5	2	2
Proper bins not provided for storage of bones and refuse	1	1	1	—
Refuse bin accommodation unsatisfactory	—	—	—	2
Yards, surface defective or dirty	1	2	—	—
Other defects	3	7	3	6
Suitable and sufficient personal washing facilities not provided	9	17	13	17
Supply of soap and clean towels not sufficient or not provided	7	19	11	12
Cooking ranges not provided with means for removal of cooking fumes or accessible for cleansing	1	—	—	1
Sanitary accommodation not in compliance or not provided	5	5	4	3
Totals	38	92*	63	69

* The defects remedied include defects outstanding from the previous year.

Public Health (Prevention of Contamination of Food) Regulations (N.I.), 1948

Conditions discovered in food premises (excluding butchers, ice cream, fish and chip shops, restaurants, cafes, snack bars, canteens, and licensed premises).

TABLE B55

Nature of conditions	Instances	Remedied	In progress	Out-standing
Ceilings, walls, doors, windows, floors, etc., in disrepair ..	12	14	—	2
Ceilings, walls, doors, windows, floors, etc., required cleansing and re-decoration ..	5	5	—	—
Lighting and ventilation not provided or insufficient ..	9	10	—	8
Sink: hot and cold water not provided or insufficient ..	3	9	3	21
Sink: wastepipe untrapped or connected direct to drain ..	1	—	—	1
Drain inlets within the food room ..	—	4	—	5
Failure to prevent risk of contamination of food ..	3	1	—	3
Equipment worn or defective: required repair or renewal ..	—	2	1	7
Fixtures and fittings in a state of disrepair ..	—	2	—	—
Cold storage facilities not provided ..	—	2	—	—
Yards, paving, walls, etc., dirty or defective ..	3	2	—	1
Proper bins not provided for storage of bones and refuse ..	2	2	—	—
Refuse Bin accommodation unsatisfactory ..	—	1	—	4
Suitable and sufficient personal washing facilities not provided ..	9	10	1	—
Soap and clean towels insufficient or not provided ..	3	5	—	—
Sanitary conveniences within or communicated direct with food room ..	5	2	1	7
Other defects ..	23	13	7	17
<i>Sanitary accommodation</i>				
Not provided or insufficient ..	1	5	4	7
Light and ventilation not provided or insufficient ..	1	1	—	—
Floors, basins, walls, seats, etc., dirty or defective ..	24	18	8	2
Flush to water closet defective or inadequate ..	4	3	—	1
Screens, doors, fasteners, etc., defective or not provided ..	3	1	—	2
Totals ..	111	110*	25	88

*The defects remedied include defects outstanding from the previous year.

Conditions discovered in restaurants, cafes, snack-bars and non-industrial canteens.

TABLE B 56

Nature of conditions	Instances	Remedied	In progress	Out standing
No proper preparation room ..	—	4	1	1
Dining rooms: walls, ceilings, floors, etc., in disrepair ..	—	4	2	2
Dining rooms: light and ventilation not provided and maintained ..	—	5	1	4
Kitchens: walls, ceilings, floors, etc., in disrepair ..	1	—	—	1
Kitchens: light and ventilation not provided and maintained ..	—	1	—	—
Foodstores: walls, ceilings, floors, windows, etc., required cleansing ..	—	1	—	—
Foodstores: walls, ceilings, floors, etc., in disrepair ..	—	3	3	—
Foodstores: light and ventilation not provided and maintained ..	—	1	1	—
Preparation rooms: walls, ceilings, floors, etc., in disrepair ..	—	2	3	3
Fixtures and fittings in a state of disrepair ..	—	1	—	1
Suitable and sufficient personal washing facilities not provided ..	—	3	—	2
Soap and clean towels not sufficient or not provided ..	—	2	—	—
Sink: hot and cold water not provided or insufficient ..	—	—	—	1
Equipment defective, worn required repair or renewal ..	—	2	2	1
Swill-bin accommodation unsatisfactory or bins not provided ..	—	—	—	1
Sanitary conveniences, dustbins, etc., within or communicating directly ..	—	2	1	2
Unsuitable cloakroom accommodation ..	—	1	—	2
Other defects ..	2	2	1	1
<i>Sanitary accommodation</i>				
Floors, basins, seats, walls, etc., dirty or defective ..	—	—	—	1
Not provided or insufficient for males ..	3	8	1	6
Not provided or insufficient for females ..	3	8	1	6
Totals ..	9	50*	17	35

*Defects remedied include defects outstanding from the previous year.

Conditions discovered in licensed premises and bottling stores.

TABLE B 57

Nature of conditions	Instances	Remedied	In progress	Out-standing
Sanitary conveniences, dustbins, etc., within or communicating direct	—	1	—	—
Beer cellars and bottling stores, walls, ceilings, floors, windows, etc., required cleansing	2	—	—	2
Beer cellars and bottling stores, walls, ceilings, floors, etc., in disrepair	—	1	—	—
Beer cellars and bottling stores, light and ventilation not provided and maintained	—	1	—	—
No proper preparation room for preparation of snacks	—	2	1	—
Suitable and sufficient personal washing facilities not provided	6	4	—	4
Soap and clean towels insufficient or not provided	2	3	—	1
Failure to prevent risk of contamination of food	—	2	—	—
Beer pipes, trays, drainers, or sinks, defective, worn or cleanliness not maintained	—	2	—	—
Bottlewashing facilities insufficient or not provided	1	2	—	1
Yards, paving, walls, etc., in disrepair	—	2	—	—
Other defects	3	3	1	2
Sanitary accommodation				
Urinals: absence of or insufficient flush thereto	1	1	—	—
Totals	15	24*	2	10

*Defects remedied include defects outstanding from the previous year.

Belfast Corporation (General Powers) Act (Northern Ireland), 1948, Section 25

Registration and inspection of premises used for the business of a vendor of fried fish and fried potatoes

Registered at 1st January, 1960	200
Registered during the year	15
Registrations refused during the year	—
Registrations cancelled during the year	1
Summonses issued during the year for unregistered premises	2
Deleted during the year	11
Registered at 31st December, 1960	203
Inspections of registered premises	585

Conditions discovered on inspection:—

TABLE B 58

Nature of conditions	Instances	Remedied	In progress	Out-standing
Ceilings, walls, floors, doors, etc., in disrepair	4	2	—	2
Sink; wastepipe untrapped or connected direct to drain	—	1	—	—
Cooking ranges not provided with means for removal of fumes or accessible for cleansing	1	1	—	—
Suitable and sufficient personal washing facilities not provided	—	1	—	—
Soap and clean towels not sufficient or not provided	—	1	—	—
Drain inlets within or communicating direct with food room	1	1	—	—
<i>Sanitary accommodation</i>				
Floors, basins, walls, etc. dirty or defective	7	4	—	3
Totals	13	11*	—	5

*Defects remedied include defects outstanding from the previous year.

Summary of legislation under which action was taken to bring food premises into compliance

Notices served under the various Acts and Regulations where breaches were discovered by Food and Drugs Inspectors during the year:—

TABLE B 59

Type of Business	Public Health (Prevention of Con- tamination of Food) Regulations (N.I.) 1948	Shops Act (N.I.) 1946	Public Health (Ireland) Acts 1878-1946	Belfast Corporation Acts 1845 to 1956	By- laws	Total
Cafes	1	—	3	4	—	8
Licensed premises	9	1	5	—	1	16
Butchers	11	—	6	1	—	18
Confectionery	4	3	9	1	1	18
Fish	3	—	3	—	—	6
Fruiterers	2	—	5	—	—	7
Grocers	11	—	22	1	2	36
Provisions	—	—	1	—	1	2
Totals	41	4	54	7	5	111

Pests Control

Rodents

To maintain control of rodent infestation in surface properties, a systematic survey of all business premises in the City is carried out in order that the presence of rats and mice may be revealed and the infestation dealt with. This survey, which is continuous, is a constant reminder to occupiers that a section of the Health Department exists to deal with or advise on rodent control. Occupiers invariably report to the Department any evidence of the presence of rodents in their premises for either an extermination campaign or advice on destruction methods.

Measures adopted depend upon the estimated degree of infestation. The following classification is adopted as a guide:—

Minor:—This applies to an infestation of less than 20 rats and chiefly occurs in dwelling houses, small shops and isolated business premises.

Major:—This class of infestation, including anything from 20 to 200 rats, occurs in large factories, blocks of warehouses, blocks of buildings in which there are restaurants, grocers' shops and premises where food is prepared, stored, etc.

Reservoir:—These are infestations of over 200 rats. They are present in the sewers of large cities, refuse tips, refuse destructors, etc.

This classification refers to the number of rats, not to the density of rat population, that is, a large number of rats can be found in small premises. This may be called a "dense" infestation and presents quite a different problem to the more difficult job of dealing with the same number of rats in a number of premises covering a large area. This may be called a "diffuse" infestation.

It is important in all cases of infestation to locate the source, otherwise the problem cannot be dealt with effectively. Rodents may be brought into premises by means of packages or farm produce, may obtain entrance by means of structural defects or infestation may be due to some hidden drain or sewer defect either outside or inside the premises. The aim has always been to concentrate on locating the source of infestation if at all possible and to take appropriate action. In every complaint of rats a thorough inspection of the premises, together with those adjoining, is made to obtain an idea of the infestation conditions prevailing in the entire block of property. This is necessary because rodents may be harbouring in one place and visiting others in search of food and water. In any case collective action is essential if the appropriate treatment is to be put on a comprehensive basis for a satisfactory result.

Mouse infestations are in many respects more difficult to deal with than those of rats, particularly in dwelling houses and food premises. Their movements are uncertain or erratic. They climb well, making use of such domestic furnishings as curtains, drapings, etc., and find harbourage behind skirting boards, round chimney breasts and behind cupboards and fixtures. They raid stocks of food, larders and food left on tables, etc., destroying and contaminating food. They also destroy clothing and fabrics

left in drawers, using them for nesting purposes. Paper can be a source of food for them if nothing else is available.

During the year the rodent control staff surveyed 10,261 sites in connection with the systematic survey and investigation of complaints and a further 13,526 visits were made entailing operational visits and re-examination of buildings and lands. Of the 10,261 sites examined 537 were found infested, details of which are shown in the statistical data.

During the year 305 buildings were disinfested and 54 were in the process of being disinfested at the end of the year. The destruction of rats and mice within the area of infestation in the shortest possible time is the purpose of the Pests Control Section. In this way the danger of infestation by the invasion of rodents from adjoining buildings and lands and the natural increase of rodents by breeding is reduced to a minimum.

The 23,787 inspections, surveys, etc. do not include inspections made by Public Health Inspectors under the Rats and Mice (Destruction) Act 1919 in relation to dwelling houses.

Statistical details:—

Surveys of lands and premises	23,787
Lands, premises, etc. found infested	537
Rat infestation:	
1. Food premises	76
2. Non-food premises	263
Mouse infestation:	
1. Food premises	74
2. Non-food premises	124
Premises treated by Pests Officers	336
Poison campaigns carried out by Pests Officers on request of the occupier who undertook to pay costs	359
1. For rats	236
2. For mice	123
School buildings and meals kitchens treated at the request of the Director of Education	13
Poison campaigns carried out in school buildings and meals kitchens	17
1. For rats	10
2. For mice	7
Premises cleared of rats and mice by Pests Officers	305
Premises where the clearing process was not completed at the end of the year	54
Premises test baited	8,580
Premises wherein the occupier undertook to eliminate rats and mice on statutory or verbal notice under the Rats and Mice (Destruction) Act, 1919	178
1. Action taken by rodent destruction firms	12
(a) For rats	10
(b) For mice	2
2. Action taken by the occupiers	166
(a) For rats	94
(b) For mice	72
Premises having no evidence of rats or mice at the time of surveying but with rodent destruction firms on contract	143
Premises where rat proofing and other work was done to prevent re-infestation	41
Notices served under the Rats and Mice (Destruction) Act, 1919	126
Summonses issued under the Rats and Mice (Destruction) Act, 1919	1
Premises where the drains were tested on complaint of rats	519
Premises where the drains were defective on test	245
Drains repaired	372
Drains re-laid	260
Number of rat destruction campaigns carried out at Corporation tipping grounds	13

Sewer Treatment

After consultation with the City Surveyor the treatment of the City's sewerage system began in 1946. This was at first experimental but it has proved effective in the extermination of rats. The treatment was extended from time to time until now, with the co-operation of the Surveyor, a large section of the sewerage system is subjected to systematic treatment which has brought the rat population in the sewers under satisfactory control. This is especially noticeable in the city centre where no major rat infestation of premises exists. In order to maintain effective rodent control in the City it is essential for surface and sewer rodent control to be closely co-ordinated, therefore it has been necessary to maintain a constant watch on the breeding and migration of rats through sewers and dams with a view to eliminating infestations of buildings and lands from the sewers. The method employed is similar to that of previous years, and consists of poison baiting with either zinc phosphide or arsenious oxide at all manholes in areas which have not been shown by test baiting to be free from rats. The poison bait is preceded by two placings of plain bait on alternate days.

The total area of the City which is subjected to periodical treatment against rats in sewers is bounded by:—

North—Crumlin Road, Ballysillan Road, Oldpark Road, Westland Road, Hughenden Avenue, Skegoneill Avenue, U.T.A. Railway, Corporation Street and Donegall Quay.

South—Donegall Road, Glenmachan Street, Olympia Drive, Capstone Street, Osborne Park, Deramore Park, Stranmillis Road and River Lagan.

East—Station Street, U.T.A. Railway, Holywood Road, Belmont Road, Earlswood Road, Sandown Road, North Road, Loop River, Ardenlee Avenue, Ravenhill Road, Carolan Road and Annadale Embankment.

West—Woodvale Road, Ballygomartin Road, Britton's Lane, Springfield Road, Whiterock Road and Falls Road.

This section of the City is divided into 63 sewer areas involving the treatment of 5,962 manholes.

Rat destruction campaigns carried out in the sewerage system	..	216
Manholes treated in the sewer area	.. .. .	.. 5,962
Pre baits laid	.. .. .	.. 18,332
Pre baits taken	.. .. .	.. 9,919
Poison baits laid in manholes	.. .. .	.. 5,000
Poison baits taken by rats	.. .. .	.. 4,822

Mosquito Control

The seasonal work of mosquito control began on the 7th April and ended on the 25th October, 1960. Preliminary surveys of potential breeding areas were carried out in April and insecticidal fog was applied periodically by the Todd Insecticidal Fog applicator to those areas where this was possible.

The following areas were subjected to this treatment:—

The Bog Meadows

Fields adjoining Holywood

Swampy ground adjoining Cairnburn Crescent and Road

Swampy ground at Short Bros. & Harland Ltd., Sydenham

Swampy ground at Orangefield and at Orby Road

Lester's dam and fields adjoining south end of Deramore Park and Drive

Pond, etc., at Stranmillis Training College

Swampy ground and pond at Newforge

Pond at Musgrave Park

Slob-land, Duncrue Street

Other areas treated by hand spraying:—

Ditches along U.T.A. Railway from Downview Bungalows to Greencastle

Ditches, etc., at rear of Kirkliston Drive

Ditches in field at Rosevale Park (Knock Road)

Swampy ground adjoining Elmgrove, Beersbridge Road

Inspections of the ponds and ditches in Royal Belfast Academical Institution grounds, Cranmore Park, revealed no evidence of mosquito breeding. Garden plots were inspected and water containers in which mosquito larvae were found were treated with larvicide.

The following plots were inspected and treated:—

Adelaide, Beersbridge Road, Flora Street, Holyrood (Malone), Monarch Street, Westland Road and Whiterock Road.

The suppression of mosquito breeding during the season was satisfactory. Although the rainfall was much greater than last year and provided more breeding places, comparatively few complaints were received. The Bog Meadows continues to be the biggest problem for mosquito control. This year the anti-mosquito measures were somewhat handicapped by the road construction work through this area from Stockman's Lane to Donegall Road.

During the season the following inspections were made, treatments carried out and materials used:—

Surveys of mosquito areas	..	..	..	..	258
Areas treated with larvicide	..	..	..	..	164
Mileage run by vehicle	..	..	..	..	734
Waste transformer oil used	..	..	..	..	1,080 gallons
Larvicide used	..	..	..	..	47 ..
Paraffin oil used	..	..	..	..	38 ..
Petrol used by vehicle and Tifa machine	..	..	..	..	164½ ..

Other Insect Pests

The Department is made aware of the existence of infestation of premises by insects either in the course of inspections, not necessarily made for that purpose, or on advice being sought by occupiers as to the identity or eradication of particular specimens. These have included cockroaches, bed-bugs, fleas, flies, mosquitoes, moths, spider beetles, wood beetles, steam flies, Pharaoh's ants, etc. Complaints referred to this section are investigated and complainants advised on the best method of dealing with their problem. Treatment in special circumstances on request from Public Health Inspectors, Health and Welfare Visitors was applied when considered necessary. The campaign against the house fly continued this year and the principal target was the breeding sites and for this purpose regular periodic treatment of manure dumps was carried out from early spring until autumn. This service has proved its worth in a considerable abatement of the fly nuisance during the summer months. The Corporation tipping grounds at Annadale, Beechmount and slob-land, Duncrue Street, were more difficult for fly control due mainly to the difficulty in obtaining sufficient material for proper controlled tipping. By arrangement with the Cleansing Section of the City Surveyor's Department, regular periodic treatment was carried out during the fly season. Food premises were visited and advice given on fly control and in many instances demonstrations were given of an aerosol spray suitable for use in most food shops for an almost immediate knock down action.

Rag merchants' premises continued to receive the monthly treatments of insecticide for vermin, for which payment was received by the Corporation. Several complaints were received about a plague of small flies in several districts in the south and east of the City. The insect was identified as *dilophus febrilis* sometimes called without justification the "Fever Fly". It is a very small fairly common fly and may be found from spring until late October. Occasionally, as in this instance, it occurs in enormous numbers on grass, trees, buildings, etc., but the swarms are of a temporary nature and soon disappear. It is seldom found in large numbers inside buildings and dwellings. Corporation houses were, on request from the Estates Department, disinfested of fleas and bugs and this usually occurred when

there was a change of tenancy. During the year it was necessary to treat 41 dwelling houses for bugs and 72 premises for cockroaches and steam flies.

Inspections of premises on complaint from Public Health Inspectors, Health and Welfare Visitors, occupiers, etc.							1,861
Premises found infested							389
(a) Bugs							41
(b) Cockroaches and steam flies							72
(c) Fleas							89
(d) Flies							146
(e) Other insects							41
Premises treated with insecticide							499
Stables and cattle yards treated							283
Rag stores treated							125
Corporation tipping grounds—number of treatments							39
Visits to food shops and aerosol demonstrations							461

The Hydrogen Cyanide (Fumigation) Act, 1938.

The Hydrogen Cyanide (Fumigation of Buildings) Regulations (Northern Ireland) 1952

Notifications of intention to fumigate buildings with hydrogen cyanide to destroy mill pests—3

The Lister-Todd Insecticidal Fog Applicator

In addition to mosquito control and the application of insecticides, the TIFA machine was used for the testing of drains and sewers which could not be tested by the hand operated machine, or in cases where the smoke test revealed no defects, due to the impossibility of obtaining the necessary pressure of smoke in the drain to make a satisfactory test.

Sewer and drain tests by TIFA machine	85
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Disinfection

The Disinfecting and Cleansing Station, situated at the Laganbank Road, is a one storey building with two sections, one for infected and the other for disinfected articles. Two high-pressure steam disinfectors are supplied with steam from an electrode boiler. In the event of infectious disease occurring in any premises the necessary disinfection is carried out by the staff from this section and the infectious bedding in certain cases of infectious diseases is removed for treatment at the Disinfecting Station. Applications are made for disinfection of premises in which no infectious disease has occurred, often when a change of tenancy takes place, and in these cases treatment is carried out, the cost being charged to the occupier of the premises. Disinfection of articles is carried out at the station for the Antrim and Down Health Authorities in accordance with an agreement. Second hand clothing for export is brought to the station by traders for disinfection and the cost is charged to the traders.

Articles disinfected at the Disinfecting Station:—

By steam	3,792
By formalin	1,933

In addition:—

Articles destroyed on request	128
Library books withdrawn from circulation and returned after three months to the Central Library	317
2 private library books disinfected	29
Persons bathed and disinfected at the station	87
Visits to premises where infectious disease occurred	1,215
Premises disinfected	436
Miles covered by vehicles in the disinfection of premises, bedding, etc.	5,967

Cleansing Clinic

During the year 112 verminous persons were deloused and 1,394 articles of clothing and bedding were disinfested at the Cleansing Clinic. 123 persons including children were treated for scabies, involving 248 treatments. The table shows the number of persons treated for scabies during recent years.

TABLE B 60

Year	First Treatment	Subsequent Treatment	Total
1954	41	21	62
1955	66	80	146
1956	105	125	230
1957	100	66	166
1958	69	47	116
1959	85	96	181
1960	123	125	248

Flooding

The heavy rainfall in the month of August caused flooding of streets in the Donegall Road area, but no dwellings were affected by the flooding and consequently no disinfectant was supplied to householders.

Particulars of Cases heard by the Magistrates during the year at the instance of the Health Department for breaches of public health legislation

TABLE B 61

Proceedings	Offences	Summonses	Orders	Fines
Belfast Corporation Acts, 1845 to 1956	Failed to provide dustbin	1	—	£ s. d. —
	Failed to register premises as a vendor of fried fish or fried potatoes	1	—	3 0 0
	Failed to register premises as a vendor of fried fish or fried potatoes (continuing offence)	1	—	1 2 0
	Vendor of fried fish or fried potatoes By-Laws	—	—	—
	Failed to wear clean washable overalls	3	—	1 10 0
	Failed to provide proper and suitable sanitary conveniences for use of male and female patrons	1	—	3 7 0
	Failed to cleanse and/or repair drains	6	—	—
Factories Acts (N.I.) 1938 to 1959	Failed to provide separate sanitary accommodation for both sexes	1	—	P.O.A.
Public Health (Ireland) Acts 1878 and the Housing (Ireland) Act, 1919	Contravention of By-Laws in respect of houses occupied by workers and let-in-lodgings or occupied by members of more than one family	63	—	40 2 0
	Disobedience (continuing offence)	1	—	16 13 0
Public Health (Ireland) Acts, 1878 to 1946	Failed to abate public health nuisances	2,045	277	325 12 0
	Disobedience of Magistrates' Orders to abate public health nuisances	25	—	171 12 7
	Waterclosets not provided with sufficient water for flushing purposes	84	—	26 10 0
	Waterclosets not provided with sufficient water for flushing purposes (continuing offences)	4	—	3 0 0
	Sold or exposed for sale food unfit for the food of man which was seized and destroyed by Order of Resident Magistrate	10	—	29 0 0
	Refused to obey an Order of a Resident Magistrate to admit a Public Health Inspector to premises for the purpose of inspection	1	—	5 0 0
	Failed to provide sufficient sanitary accommodation	1	—	3 0 0
	Failed to provide suitable sanitary accommodation (continuing offence)	1	—	20 5 0
	Obstructed an authorised officer in the execution of his duties	1	—	5 0 0

TABLE B 61 (continued)

Proceedings	Offences	Summonses	Orders	Fines
				£ s. d.
Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927 to 1958	Sold foods containing prohibited preservatives	8	—	31 0 0
	Sold foods containing preservatives in excess of the amount allowed	3	—	15 0 0
Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland) 1948	Food prepared or stored in a room communicating directly with a sanitary convenience	2	—	4 0 0
	Food prepared or stored in a room where there was an outlet for ventilation of a drain	2	—	2 0 0
	Failed to keep in proper repair walls, ceilings, floors, windows and doors in a room where food was prepared for sale	1	—	1 0 0
	Disobedience (continuing offence)	1	—	4 11 0
	Failed to finish with a hard, smooth and durable material, walls of a room where food was prepared for sale	1	—	1 0 0
	Used a room as a living room or sleeping place in which food was prepared or stored for sale	7	—	20 0 0
	Failed to secure and maintain suitable and sufficient means of ventilation in rooms used as food rooms	1	—	1 0 0
	Failed to provide adequate washing facilities for use of persons employed in the preparation of food for sale	4	—	7 0 0
	Disobedience (continuing offence)	1	—	4 11 0
	Failed to observe due cleanliness of rooms where food was deposited for sale	3	—	13 0 0
	Failed to secure the cleanliness of vehicles used in conveyance of food for sale	6	—	11 0 0
	Failed to take all reasonable precautions to prevent contamination of food in preparation for sale	1	—	5 0 0
Rats and Mice (Destruction) Act, 1919	Failed to take reasonable steps which were necessary to destroy vermin on premises	1	—	2 0 0
Sale of Food and Drugs Acts, 1875 to 1899	Did wilfully obstruct inspector in the execution of his duties	1	—	10 0 0
Shops Act (Northern Ireland) 1946	Contravention of Section 22	1	—	1 0 0
Rag Flock Act 1911: Rag Flock (Ireland) Regulations, 1912	Did have in possession for the purpose of making articles of upholstery flock manufactured from rags which said flock did fail to conform to the standard of cleanliness prescribed in the Regulations	1	—	5 0 0
Ice-cream Acts (Northern Ireland) 1937 to 1957	Sold ice-cream in unregistered premises	1	—	2 0 0
Food and Drugs Act (Northern Ireland) 1958	Sold ice-cream in unregistered premises	5	—	17 10 0
Food and Drugs Act (Northern Ireland) 1958	Adulteration of foodstuffs	6	—	12 0 0
	Did sell or expose for sale food unfit for human consumption which was seized and destroyed by Order of Resident Magistrate	4	—	15 0 0

The number of Pupil Public Health Inspectors engaged in full time practical training in the Department at 31st December, 1960, was 12. During the year Mr. D. H. Boucher and Mr. G. W. Huddleston, pupils trained in the Department, were successful in qualifying as Public Health Inspectors by examination held by The Public Health Inspectors' Education Board and subsequently received appointments in the Department. Mr. J. G. Butler, Mr. F. N. Johnston and Mr. F. B. Potter, Public Health Inspectors, were successful in qualifying as Inspectors of Meat and Other Foods. The examination was held by the Royal Society for the Promotion of Health, London.

I should like to place on record my thanks to the Medical Officer of Health for his kindness and help and to the Inspection and clerical staffs for their efforts in the past year of coping with the varied and ever changing duties they are called upon to perform.

Finally I would like to acknowledge with thanks the assistance which I personally and the other members of the staff received from the Chief Officers and staffs of the other Departments of the Corporation.

JOSEPH WALKER,

Chief Public Health Inspector

RAINFALL IN INCHES

TABLE B 62

Month	1953	1954	1955	1956	1957	1958	1959	1960
January ..	1.78	3.05	3.05	4.19	4.85	4.78	2.52	3.75
February ..	1.61	4.57	3.87	1.31	2.52	6.49	1.40	2.53
March ..	0.41	4.96	1.27	1.77	3.78	2.19	2.89	2.55
April ..	2.09	0.75	3.03	1.50	2.04	2.07	2.72	2.93
May ..	2.49	4.03	3.15	1.85	2.95	3.88	1.94	2.19
June ..	1.53	3.05	5.26	3.27	1.20	7.83	2.64	2.55
July ..	6.39	4.17	1.64	3.77	4.39	4.79	4.36	5.31
August ..	3.30	2.87	1.18	6.69	3.93	4.66	0.87	7.28
September ..	2.67	5.15	4.79	4.19	5.93	5.46	1.53	2.83
October ..	2.17	7.08	2.83	3.15	4.55	2.09	3.28	5.38
November ..	4.23	7.27	3.31	2.12	2.10	2.35	3.43	5.04
December ..	3.62	6.66	6.69	6.10	5.53	6.13	6.07	2.36
	32.29	53.61	40.07	39.91	43.77	52.72	33.65	44.70

Data supplied by the Belfast City and District Water Commissioners. Readings taken at Oldpark Station. Gauge at 200 feet O.D.

REPORT OF THE CITY VETERINARIAN FOR THE YEAR 1960

Report of the work at the Belfast Municipal Abattoir in connection with Ante-mortem and post-mortem examinations of animals slaughtered for human food.

Number and description of animals slaughtered each month

TABLE C 1

Month	Cows	Heifers	Bulls	Bullocks	Calves	Sheep and Lambs	Goats	Pigs
January ..	227	88	13	4,531	39	16,064	120	391
February ..	190	112	56	4,758	74	13,442	101	682
March ..	151	126	9	5,269	83	9,858	88	558
April ..	130	105	13	4,697	54	12,051	64	420
May ..	146	110	9	4,891	36	14,918	16	348
June.. ..	103	106	1	4,427	23	15,478	5	629
July ..	216	228	1	3,861	71	15,125	3	672
August ..	544	321	4	4,325	24	18,047	18	831
September ..	465	273	5	5,011	124	19,791	6	462
October ..	491	343	6	4,936	61	22,609	10	506
November ..	376	214	3	5,621	123	22,692	32	797
December ..	90	180	5	4,886	23	16,112	25	1,137
	3,129	2,206	125	57,213	735	196,187	488	7,433

Total of animals slaughtered—267,516

Compared with 1959, cattle show an increase of 7,540; calves an increase of 256; sheep and lambs an increase of 14,633; goats an increase of 60 and pigs an increase of 4,115.

Carcases condemned from all causes in 1960, compared with 1959

TABLE C 2

Description					1959	1960
Cows .. ..	..	..	..	..	52	43
Heifers ..	..	..	..	..	17	21
Bulls ..	..	..	..	..	1	3
Bullocks ..	..	..	..	..	64	30
Calves ..	..	..	..	..	18	27
Sheep and Lambs ..	..	..	..	..	871	577
Goats ..	..	..	..	..	16	20
Pigs ..	..	..	..	..	104	149
					1,143	870

Diseased conditions which involved seizure and total destruction of carcasses in 1960

TABLE C 3

	Cows	Heifers	Bulls	Bullocks	Calves	Sheep	Goats	Pigs	Total
Abcesses	—	—	—	—	—	3	—	12	15
Anaemia	—	1	—	—	—	2	—	—	3
Cysticercus Bovis	—	—	—	3	—	—	—	—	3
Decomposed	—	—	—	—	—	7	—	6	13
Dropsical	2	2	—	—	4	358	13	—	379
Enteritis	—	—	—	—	1	2	1	7	11
Fevered	6	1	—	3	—	41	1	20	72
Fibrosis	—	—	—	1	—	—	—	—	1
Gangrenous	1	—	—	—	—	2	—	1	4
Injured	4	—	—	1	—	17	—	2	24
Immature	—	—	—	—	9	—	—	—	9
Jaundice	1	—	—	—	1	—	—	—	2
Joint Ill	—	—	—	—	3	—	—	—	3
Leukaemia	—	—	—	—	—	1	—	1	2
Neoplasms	1	—	—	—	1	4	—	—	6
Objectionable odour	—	—	—	1	—	—	—	—	1
Oedema	2	1	1	—	3	45	3	10	65
Pigmentation	—	—	—	—	—	—	—	1	1
Pyæmia	—	—	—	—	—	12	—	27	39
Redwater	—	2	—	1	—	—	—	—	3
Septic	—	—	—	—	—	1	—	3	4
Septicaemia	6	—	1	2	—	14	—	13	36
Septic Arthritis	—	—	—	—	—	—	—	2	2
„ Mastitis	3	—	—	—	—	2	—	—	5
„ Metritis	5	1	—	—	—	6	—	1	13
„ Pericarditis	2	—	—	—	—	—	—	3	5
„ Peritonitis	—	—	—	—	—	14	—	6	20
„ Pleurisy	—	1	—	—	1	15	—	4	21
„ Pneumonia	—	—	—	—	—	28	2	16	46
Swine Erysipelas	—	—	—	—	—	—	—	1	1
Tetanus	—	1	—	—	—	1	—	—	2
Toxaemia	5	3	—	3	4	2	—	1	18
Tuberculosis	5	8	1	15	—	—	—	11	40
Uraemia	—	—	—	—	—	—	—	1	1
	43	21	3	30	27	577	20	149	870

In addition to the above there were 3 tons 3 qrs. 2 lbs. injured beef; 3 tons 14 cwts. 2 lbs. other causes (tuberculosis, etc.) 6 tons 1 cwt. 3 qrs. 19 lbs. mutton; and 6 tons 6 cwts. 7 lbs. pork seized as being unsound and unfit for human food.

TABLE C 4 Diseased organs seized and destroyed in 1960 compared with 1959

	1960	1959	Increase	Decrease
Beef:				
Heads	862	1,627	—	765
Tongues	875	1,640	—	765
Hearts	223	446	—	223
Lungs	739	2,950	—	2,211
Livers	21,990	25,733	—	3,743
Stomachs	260	563	—	303
Udders	100	447	—	347
Mesenteries	179	462	—	283
Omentum	86	496	—	410
Diaphragms	78	291	—	213
Kidneys	173	377	—	204
Mutton:				
Lungs	884	1,546	—	662
Livers	17,690	25,664	—	7,974
Kidneys	178	7	171	—
Pork:				
Heads	141	89	52	—
Hearts	50	40	10	—
Lungs	444	216	228	—
Livers	371	228	143	—
Kidneys	113	49	64	—

The above does not include the viscera of animals totally destroyed.

Percentage incidence of generalised tuberculosis in animals slaughtered in 1960 compared with 1959

TABLE C 5

	1960	1959
Cows .. .. .	.16	.66
Other Cattle .. .. .	.04	.15
Cattle (all classes) .. .. .	.05	.13
Calves	—	—
Pigs .. .. .	.15	.26

(This does not include cattle slaughtered under the attestation scheme).

TABLE C 6

	Amount of beef, mutton, pork, etc., presented for examination
Beef	1,360 sides, 812 quarters and 352 cuts examined; 1 cwt. 1 qr. seized and destroyed.
Mutton	2,367 carcasses and 5 cuts examined; 1 carcass, and 2 qrs. 9 lbs. seized and destroyed.
Pork	234 carcasses and 1 cut examined; 39 carcasses and 7 cwts. 3 qrs. 9 lbs. seized and destroyed.
Fowl	76 examined; 57 seized and destroyed.
Tinned meats	400 examined; 400 seized and destroyed.
Fish	19 cwts. 1 qr. 22½ lbs. cod, plaice, etc., seized and destroyed.

Cysticercus Bovis

During the year cysticercus bovis infections were shown to be present to the extent of 1.09 of all bovines slaughtered at the Abattoir; compared with the previous year 1959 this shows an increase of .12.

During the year there were three instances in which the disease existed in a generalised form (Table C 3) the parasite being widely distributed throughout the carcass musculature.

This parasite is of great importance from a meat inspection aspect as it is communicable to man if the meat is eaten in a raw or improperly cooked state, giving rise to the tape worm (Taenia Saginata).

To my staff for their loyal support and manner in which they carried out their duties at all times, I say, "thanks".

ALEX. McLEAN, B.Sc., M.R.C.V.S., D.V.H.

**REPORT OF SENIOR MEDICAL OFFICER, MATERNITY AND CHILD HEALTH DIVISION,
FOR THE YEAR 1960**

Notification of Births Act.

The total number of births notified as occurring in the area during the year was 11,514. Of these 5,984 were males, 5,528 were females, 2 sex unknown; 297 were still births.

TABLE D 1

Births occurring in				
Hospitals	..	..	..	8,047
Private nursing homes	..	..	..	330
Other institutions	..	..	..	108
Home	..	..	..	2,558
Home (Hosp. district cases)	..	..	..	471
Total				11,514

Infant Mortality

During the year, 243 children died under the age of 12 months giving an infant mortality rate of 28. The rate for the previous year was 33.

Neonatal and Perinatal Mortality

Deaths occurring during the first month of life numbered 173 giving a neonatal mortality rate for the year of 20. The rate for the previous year was 22. The perinatal rate, i.e. stillbirths and deaths during the first week per 1,000 total births (live and still), was 42 against 40 for the previous year.

Maternal Mortality

The number of women who died from pregnancy, childbirth and the puerperal state during the year was 3, giving a maternal mortality rate of 0.34 per 1,000 live births. The rate for the previous year was 0.24. Table D13 shows the Maternal Mortality per 1,000 live births analysed according to the cause of death.

Health Visiting

53 Health Visitors were employed at the end of the year.

The routine visitation and supervision of the health of infants and young children forms the main part of the work, but the after-care of ex-hospital patients and the follow-up of special cases also occupies a considerable portion of the health visitors' time.

Regular liaison visits are made once or twice weekly to hospitals by certain members of the staff, the information exchanged being most helpful. Some also attend the Child Guidance Clinic at the Royal Belfast Hospital for Sick Children.

The Health Visitors assist the Welfare Department in the administration of the Home Help Scheme as far as expectant mothers and mothers of young children are concerned, and a close liaison is maintained with that Department in many aspects of child care.

They had the opportunity of attending refresher courses during the year and Dr. D. Gardiner, Psychiatrist, Purdysburn Mental Hospital continued a series of lectures on Mental Health. Certain members also continued to give lectures in connection with training courses for students. A number of health visitors working in the tuberculosis field are attached to the Central Chest Clinic at Durham Street, and work in association with the Consultant Medical Staff of the Clinic.

Visits paid during the year were as follows:—

- (1) To expectant mothers: First visits, 1,490; Re-visits, 1,743; Total, 3,233.
- (2) To children under one year of age: First visits, 8,877; Re-visits, 50,282; Total, 59,159.
- (3) To children between 1 and 5 years: 76,682.
- (4) To Tuberculosis cases, 16,514.
- (5) To Tuberculosis cases, special survey: 24,553.

Ante-Natal Clinics

As the great majority of expectant mothers attending the Ante-Natal Clinics make arrangements through the clinics for their confinement in hospital the Clinic Medical Officer maintains close contact with the hospitals. At the Royal Maternity Hospital she also assists at one of the Ante-Natal sessions, and is a member of the Honorary Medical Staff.

Specimens of blood are taken for Group, Rh factor, Wasserman, etc., and arrangements are in operation whereby private medical practitioners can refer their cases to the clinics for these tests. Some medical practitioners also refer abnormal cases for a second opinion.

Instruction in Analgesia and in relaxation has been continued in combination with a special series of Mothercraft talks. These are open to all ante-natal cases irrespective of whether they are attending for ante-natal supervision or not.

Clinics and Attendances :

TABLE D 2

					1st Visit	Re-visits
Mount Street, morning	..	..	..	..	68	778
do. afternoon	..	..	..	..	123	809
Mersey Street, Church Hall	..	..	..	..	80	575
Mountcollyer Street	..	..	..	..	71	399
Spier's Place, Shankill Road			..	..	80	549
Ariel Street	..	..	..	..	92	663
Hawthorne Street (R. M. Hosp.)		..	..	..	146	1,060
					660	4,833

1,737 Blood Tests were carried out during the year.

Child Health Centres

The number of sessions provided at the end of the year was 36 per week.

As there is still no alternative accommodation available a number of the sessions continue to be held in very unsuitable premises.

The talks to mothers with film strip illustrations were continued during the winter months and special stress was again placed on the prevention of accidents. In addition, members of the Health Visiting Staff addressed meetings of several organisations on Health topics.

Our thanks are again due to the members of the Voluntary Workers' Association for their valuable assistance throughout the year.

Centres and Attendances:

TABLE D 3

						Under 1 year	Over 1 year
Highfield	(Monday)	..	..	..	..	1,429	633
York Street	"	..	..	..	..	2,046	815
Ariel Street	"	..	..	..	..	2,242	1,107
Bloomfield	"	..	..	..	..	4,290	1,590
Stranmillis	"	..	..	..	..	2,856	851
Donegall Road	"	..	..	..	..	2,998	1,178
Glenard	(Tuesday)	..	..	..	..	2,889	1,004
Havelock Place	"	..	..	..	..	3,069	905
Mersey Street	"	..	..	..	..	2,828	923
Donegall Road	"	..	..	..	..	2,460	776
Bread Street	"	..	..	..	..	1,896	631
Mount Street	"	..	..	..	..	3,162	1,005
Ariel Street	"	..	..	..	..	3,360	1,107
Avoca Street	(Wednesday)	..	..	..	..	1,376	382
Bread Street	"	..	..	..	..	2,424	927
Ligoniel	"	..	..	..	..	1,742	541
Seaview	"	..	..	..	..	3,437	1,101
Windsor	"	..	..	..	..	2,222	738
Mount Street	"	..	..	..	..	2,744	969
Palmerston Road	"	..	..	..	..	1,475	578
Avoca Street	(Thursday)	..	..	..	..	3,548	1,063
Kimberley Street	"	..	..	..	..	3,544	1,289
Greencastle	"	..	..	..	..	2,155	1,101
Mountcollyer	"	..	..	..	..	2,337	652
Spier's Place	"	..	..	..	..	2,902	1,010
Bread Street	"	..	..	..	..	2,306	967
Susan Street	"	..	..	..	..	3,236	1,413
Mount Street	"	..	..	..	..	4,225	1,464
Malone	(Friday)	..	..	..	..	1,221	1,151
Ariel Street	"	..	..	..	..	2,687	542
Bread Street	"	..	..	..	..	2,491	1,158
Joanmount	"	..	..	..	..	2,659	1,027
Spier's Place	"	..	..	..	..	2,153	591
Strandtown	"	..	..	..	..	4,334	1,280
Mount Street	"	..	..	..	..	2,176	895
Ballymurphy	"	..	..	..	..	1,929	611
Total Attendances						94,848	33,831

Mother and Baby Homes
(Ante and Post-Natal Hostels)

TABLE D 4

Name and address of Home or Hostel		NUMBER OF BEDS						Average length of stay	
		Ante- natal	Post- natal	Labour	Isola- tion	Maternity (excluding labour and isolation)	Cots	Ante- natal	Post- natal
(a)	Hopedene	3	11	—	—	—	11	4-6 weeks	3 months
(b)	Thorndale	9	4	2	1	25	16	8-9 weeks	3-4 months

The total number of City cases admitted during the year was 29.

These hostels are in receipt of a grant from the Health Committee.

Residential Nurseries

TABLE D 5

Name and address of Nursery	Whether long stay or short stay	Number of beds provided at the end of year				
		Aged 0-9 mths.	10 mth.-2 years	Aged 2-5	Girls over 5	Boys over 5
Glendhu Hostel Holywood Road (A voluntary Hostel in receipt of a grant from the Health Committee).	Short Stay	13	28	63	36	33

106 children resident in Belfast were admitted to the Hostel during the year.

Communicable Diseases

TABLE D 6

	(1) Ophthalmia Neonatorum		(2) Pemphigus Neonatorum		(3) Puerperal fever		(4) Puerperal pyrexia	
	Dom. confinements	Instit. confinements	Dom. confinements	Instit. confinements	Dom. confinements	Instit. confinements	Dom. confinements	Instit. confinements
Number of cases notified during year	—	—	—	—	1	—	1	34
Number of cases visited by officers of the Local Authority	—	—	—	—	1	—	1	32
Number of cases—Home Nursing provided	—	—	—	—	1	—	1	—
Number of cases removed to hospitals	—	—	—	—	1	—	—	—

Midwives

TABLE D 7.

	Domiciliary midwives	No. in inst. other than Hospitals	Midwives in hospitals	Midwives in nursing homes	Total
Total number of Midwives practising at the end of the year in the area of the Local Supervising Authority ..	47	21	120	10	198

Number of cases in which medical aid was summoned during the year under Section 22 of the Midwives (Ireland) Act, 1918, by a midwife:—

Nil

Domiciliary Midwives

23 midwives were employed on a salaried and 19 on a fee-per-case basis. Progress continues to be slow in recruiting sufficient midwives to enable the service to be placed entirely on a whole-time salaried basis. Two hostels are now in operation, one in Springfield Road and the other in Templemore Avenue. Both Hostels provide for a number of resident pupil midwives.

Allowances to cover uniform, laundry and travelling are granted, the uniform being that laid down by the Joint Nursing and Midwives Council. Equipment is issued on loan, and all drugs, dressings, etc., in use are supplied to the midwives.

Special cots, etc., for the care of premature babies are available. The trend however is for these babies to be admitted to the special nurseries attached to the two large maternity hospitals in the City.

Refresher courses are arranged from time to time.

The midwives attended a total of 2,802 domiciliary cases during the year.

Maternity Medical Services

General Medical Practitioners agreeing to provide maternity medical services in domiciliary cases are enrolled on a panel maintained in the department and are paid on a fee-per-case basis. Both the doctor and the midwife are paid by the Health Committee.

The following is a summary of the work carried out under the scheme by Medical Practitioners during the year:—

TABLE D 8

Number of domiciliary confinements at which General Practitioner attended	3,175
Number of women confined at home who were examined ante-natally	3,117
Total number of ante-natal examinations made of women confined at home	23,667
Number of women referred to institutions for confinement who were examined ante-natally	502
Total number of ante-natal examinations made of women confined in institutions	3,519
Total number of final pelvic examinations made of women confined at home	2,623
Total number of final pelvic examinations made of women confined in institutions	231
Number of cases of abortion attended	660
Number of anaesthetics given by second practitioner	93

Registration of Nursing Homes

TABLE D 9

	Number of Homes	Number of beds provided for:—		
		Maternity	Dual purposes	Total
Homes first registered during the year ..	—	—	—	—
Homes on the register at the end of the year	9	49	39	88

Action during 1960:

Number of applications for registration refused	—
Number of exemptions granted	—
Number of exemptions withdrawn	—
Number of registrations cancelled	1
Number of appeals by aggrieved persons to a Court of Summary Jurisdiction	—
Number of cases in which fines were imposed	—
Number of inspections	92
Number of registered homes not inspected	—

The inspections during the year were made by the Clinic Medical Officer, the Superintendent Nursing Officer, and the Assistant Superintendent Nursing Officers.

Deaths and Death Rates per 1,000 births of Infants under one year associated with prematurity and, in the post-natal period, associated with diarrhoea and enteritis, pneumonia, broncho-pneumonia, and bronchitis

TABLE D 10

	1951		1952		1953		1954		1955		1956		1957		1958		1959		1960	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Prematurity	102	11.61	108	12.69	84	9.85	74	8.91	78	9.62	53	6.45	91	10.8	85	10.3	90	10.8	73	8.36
Diarrhoea and enteritis	45	5.12	57	6.70	65	7.62	24	2.89	29	3.58	8	0.97	10	1.2	13	1.6	12	1.4	10	1.15
Pneumonia, broncho-pneumonia and bronchitis	52	5.91	40	4.70	56	6.57	49	5.90	35	4.32	28	3.41	26	3.1	45	5.4	34	4.1	21	2.41

TABLE D 11

CAUSES OF DEATH	Under 1 month				1-11 months			Total under 1 year	
	Males	Females	Total	Rate	Males	Females	Total	No.	Rate
Tuberculosis of respiratory system	—	—	—	—	—	—	—	—	—
Tuberculosis, other forms ..	—	—	—	—	1	—	1	1	0.11
Dysentery	—	—	—	—	1	—	1	1	0.11
Scarlet fever and Streptococcal sore throat	—	—	—	—	—	—	—	—	—
Typhoid	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—
Whooping cough	—	—	—	—	—	—	—	—	—
Meningococcal infections ..	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—
Other infectious and parasitic diseases	—	—	—	—	—	—	—	—	—
Malignant neo plasms including neo plasms of lymphatic and haematopoietic tissues, Hodgkin's disease and leukaemia	—	—	—	—	1	—	1	1	0.11
Benign and unspecified neoplasms	—	—	—	—	—	—	—	—	—
Vascular lesions affecting central nervous system	—	—	—	—	—	—	—	—	—
Non-meningococcal meningitis ..	—	1	1	0.11	1	—	1	2	0.23
Other diseases of heart	—	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—	—	—
Pneumonia	—	—	—	—	12	7	19	19	2.17
Bronchitis	—	—	—	—	2	—	2	2	0.23
Intestinal obstruction and hernia ..	—	—	—	—	—	—	—	—	—
Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the new born	—	—	—	—	3	4	7	7	0.80
Cirrhosis of liver	—	—	—	—	—	—	—	—	—
Nephritis and nephrosis	—	—	—	—	1	—	1	1	0.11
Congenital malformations	15	23	38	4.35	7	15	22	60	6.87
Birth injury, post-natal asphyxia and atelectasis	—	—	—	—	—	—	—	—	—
(a) with prematurity	8	3	11	1.26	—	—	—	11	1.26
(b) without prematurity	28	9	37	4.24	—	1	1	38	4.35
Infections of new born	—	—	—	—	—	—	—	—	—
(a) with prematurity	—	—	—	—	—	—	—	—	—
(b) without prematurity	7	4	11	1.26	—	1	1	12	1.37
Other diseases peculiar to early infancy	—	—	—	—	—	—	—	—	—
(a) with prematurity	36	25	61	6.98	—	1	1	62	7.10
(b) without prematurity	9	3	12	1.37	—	—	—	12	1.37
All other causes	—	1	1	0.11	8	3	11	12	1.37
Accidents	—	1	1	0.11	—	1	1	2	0.23
Unknown causes	—	—	—	—	—	—	—	—	—
Homicide and operations of war ..	—	—	—	—	—	—	—	—	—

Infant Mortality (By Age Groups)

TABLE D 12

Sex	Under 1 day	1 day and less than 7 days	1-4 weeks	1-2 months	2-3 months	3-6 months	6-12 months	Total	Deaths of Illegitimate children
Males ..	58	34	11	3	9	14	11	140	3
Females ..	35	23	12	7	8	13	5	103	4
Total ..	93	57	23	10	17	27	16	243	7

TABLE D 13

Cause of Death	No. of Deaths	Rate per 1,000 live births
Cerebral venous thrombosis and oedema due to eclampsia	1	0.11
(i) Paralytic ileus due to ruptured uterus, due to placenta praevia (ii) Broncho-pneumonia and pulmonary oedema	1	0.11
Secondary carcinoma due to hydatiform mole	1	0.11

Infant and Neo-Natal Mortality Rates, 1885—1960

TABLE D 14

Year	Rate per 1,000 births		Year	Rate per 1,000 births	
	Infant	Neo-Natal		Infant	Neo-Natal
1885	170	—	1945	84	40
1890	162	—	1950	49	25
1895	169	—	1951	44	24
1900	152	—	1952	47	25
1905	136	—	1953	45	21
1910	143	—	1954	39	24
1915	137	—	1955	37	21
1920	132	—	1956	29	18
1925	104	—	1957	32	22
1930	78	—	1958	30	19
1935	112	—	1959	33	22
1940	122	40	1960	28	20

— indicates information not available

Home Nursing Service

The Home Nursing Staff consists of 1 Superintendent, 1 2nd Assistant Superintendent and 52 Queen's Nurses.

There were 11 nurses in training during the year. 7 were Departmental candidates and 4 were County candidates. The training remains at a high standard and several of the candidates obtained credits in various subjects at the examination.

The Superintendent attended a Training Conference arranged by the Queen's Institute of District Nursing.

4 District Nurses attended a refresher course held in Belfast.

The total number of visits paid during the year was 210,545, compared with 218,848 in 1959.

Sick room requisites such as Dunlopillo mattresses, air cushions, bed-rests, rubber sheeting, bed-pans, etc., are sent out to patients on loan when required through the Medical Comforts depot.

Home Nursing Service

Statistics of Work Done, 1960

TABLE D 15

A. Number of Cases:—					
(i)	Brought forward from 1959..	..	..	..	1,425
(ii)	New cases taken on during 1960	..	..	..	4,299
	Analysis of new cases:—				
	Tuberculosis	117			
	Cancer	246			
	Diabetes	68			
	Gynaecological	13			
	Pneumonia	35			
	Surgical	639			
	General medical	3,181			
(iii)	Removed during 1960	..	..	..	4,264
	Cause of removal:—				
	Convalescent	2,371			
	Died	603			
	To hospital	836			
	Other causes	454			
	Remaining on books at end of 1960	..	..	..	1,460
B. Analysis of visits made to all cases in 1960:—					
	Tuberculosis	7,575			
	Cancer	15,265			
	Diabetes	25,253			
	Gynaecological	975			
	Pneumonia	572			
	Surgical	24,643			
	General medical	136,262			
	Total visits	210,545			

AFTER-CARE

The Committee's scheme for dietetic assistance continued during the year. Assistance is given up to a period of six weeks after discharge from Hospital during which time the National Assistance Board, to whom each case is referred, arranges for its continuance from central funds if necessary. The total number of cases dealt with was 269. Women over 60 and men over 65 are excluded from the scheme and are dealt with by the National Assistance Board.

The transfer of the functions of the Northern Ireland Tuberculosis Authority extended the scheme to those persons recommended by chest physicians and one pint of milk is supplied daily. During the year, 1079 persons received milk under the scheme. Cases are reviewed periodically by the chest physician who recommends the continuation or cessation of supplies.

MEDICAL COMFORTS

The transfer of the functions of the Northern Ireland Tuberculosis Authority also placed on the Committee the duty of providing beds, bedding and other sick room requisites for T.B. patients discharged from Hospital for home nursing. During the year 269 persons were issued with beds, etc.

In conclusion I would like to express to the members of the staff my sincere appreciation of the excellent manner in which they discharged their duties throughout the year.

H. A. WARNOCK, M.D., B.Sc., D.P.H.,

*Senior Medical Officer
Maternity and Child Health Division.*

REPORT OF SENIOR MEDICAL OFFICER, SCHOOL HEALTH DIVISION, FOR THE YEAR 1960

Belfast Grant-Aided Schools

The School Health Service is responsible under Section 42 of the Education (Amendment) Act (N.I.) 1956 for medical inspection and treatment of all pupils attending grant-aided schools within the local authority's boundaries. In 1960 this school population was 80,506, slightly less than the previous year; they attended the schools shown in Table E 1.

During the year two Roman Catholic primary Schools which had long occupied very poor premises were closed and replaced by a single school in an excellent up-to-date building. Two more out-of-date county primary schools were abandoned and a voluntary primary school under a lay manager became a county primary school. Two more secondary schools, one county and one voluntary were opened in 1960; each of these occupies the type of modern, airy, well-lit premises which current standards demand. These new buildings must contribute to the health and well-being of their pupils and staff alike, and the school medical officer feels less inclined to move an ailing pupil to a special school from such a place.

Three voluntary secondary schools still conduct their own schemes of medical and dental inspection and treatment in accordance with Section 42 (6) of the Education (Amendment) Act (N.I.) 1956.

Staff

Again in 1960 our staff was short of two medical officers for most of the year, though one of these vacancies was filled in December.

In September three of our nurses were seconded to the Health Visitors Training Course which is now held annually by the Royal College of Nursing. During their absence on this course which lasts for three academic terms these nurses were replaced by temporary appointments.

This year saw no improvement in the shortage of speech therapists. We had throughout the year eleven sessions per week from therapists on the staff of the Royal Belfast Hospital for Sick Children working in our clinics and at special schools. A varying number of sessions each week were worked by two other therapists who retired from regular work on marriage. This amounted to the equivalent of about one and a half full-time therapists against our establishment of five.

Physiotherapists are also scarce, but for most of the year we were able to keep up to establishment. Two therapists worked full time in our clinics and various schools including Graymount Open Air School and the Ulster School for the Deaf and Blind. A number of therapists on the Staff of the Northern Ireland Council for Orthopaedic Development were seconded to work at the Fleming Fulton School where we deal with spastics and other physical handicaps; this number varied from time to time, but was usually not far from our establishment of three full-time therapists for this school. These therapists spend part of their time at Malcolm Sinclair House where they gain experience in treating physically handicapped children of nursery-school age.

Occupational therapists also work at the Fleming Fulton School where our establishment is two therapists. Again the Orthopaedic Council seconded staff some of whom shared duties at Malcolm Sinclair House. Though there were periods of shortage we were nearly up to establishment for more than half the year.

Schools Medical Inspections

The inspections carried out in schools are shown in Table E 2. Again this year we concentrated on the statutory Groups I, III, and IV. The most important entrants group was examined in full apart from some absentees; normally the team of doctor and nurse examines about twelve to fifteen entrants at a session and the attendance of parents at this examination is very good (see Table E 4). In the older groups the attendance of parents falls off and rather more pupils are examined at each session.

Though we no longer examine all Group II children we still find it necessary to examine a considerable number in this group. These consist partly of late entrants to school, new arrivals in the city whose records have not turned up, and absentees from Group I examination; there are also a number of children who have reached the class in which normally Group III are found, and are examined together with their classmates. Similar considerations explain the 28 pupils examined in Group V.

Whenever routine medical inspections are carried out at a school the principal is asked for a list of pupils whom he wishes to have examined apart from those who are due for examination with their

age group. These "specials" include children having difficulty in seeing the blackboard, those with faulty posture, chronic absentees and a host of other troubles. It is usually found that the teacher's suspicions are confirmed by the doctor and steps can then be taken to deal with the problem. An extension of this method of case-finding is sometimes advocated as one substitute for routine inspections in the older children, and an experiment on these lines would be interesting. Unfortunately the numbers referred in this way are small at present—only 437 in 1960—and the keenness of teachers varies very much in this respect.

Whenever a defect in need of attention is found at routine medical inspection the duty of the doctor and nurse is to see that it receives the necessary treatment if this is not already in hand; often the matter is already being dealt with. Other defects are found which require to be kept under observation though treatment may not be immediately needed. All these defects are listed for re-examination: the doctor at his next visit to the school makes a check to see that the condition has received the necessary attention, and if not he takes steps to have it put right. A child is kept on the re-examination list and is seen by the doctor at each annual visit to the school until the defect is cured. In this way 12,844 defects in 10,833 children were re-examined during 1960 as shown in Table E 13.

A child with a defect needing treatment is listed for re-examination whether treatment is already in train or is initiated as a result of the routine examination. Defects in the latter category for 1960 are recorded in Table E 11 which once again shows that a large number of defects (4,930 in all) needing more action than they were receiving turned up at routine examinations.

Heights, Weights and Nutrition

In 1958 we noted a halt in the steady increase of children's height and weight which had been apparent for at least the previous ten years; in 1959 the upward trend was resumed. Once again this year our Table E 3 of average heights and weights shows small increases over the 1959 measurements at most ages and in both sexes.

Once again we are able to record very few badly nourished children per thousand examined (Table E6), but the total for the year of 31 boys and 51 girls nevertheless presents a problem to be dealt with.

Defects discovered at Routine Medical Inspections

Table E7 summarises the defects found at routine medical inspections. Compared with the previous year the number of children per thousand with defects of lungs, ear, nose and throat showed a slight fall. The substantial rise from 6 in 1959 to 31 per thousand in 1960 with defects of psychological development results from a change in our criteria for recording this item and is not a true increase.

After showing a steady decrease over many years the number of children per thousand with defective vision has this year risen to 299 compared with 270 in 1959, but the number of squints remains unchanged at about 40 per thousand.

The doctors succeeded in testing the visual acuity of the great majority of entrants, but in 306 children vision could not be accurately assessed, and these will be re-examined until the matter is certain.

Table E8 shows the way in which defects of vision were distributed between right and left eyes in the 13,899 primary and 4,042 secondary schoolchildren whose sight we were able to test at routine inspections. We see from parts (a) and (c) of this table that 305 primary and 250 secondary schoolchildren (the sum of the 16 lower right-hand squares in each part of the table) had visual acuity of 6/24 or worse in each eye; this degree of visual loss if not corrected is a very serious handicap to a child both academically and otherwise, but fortunately as shown in parts (b) and (d), only 20 children at primary and 6 at secondary schools failed to improve with glasses to better than 6/24 in at least one eye. These 26 children fall into the handicap category of "Partially Sighted".

Table E9 shows how defects of colour vision are distributed in boys and girls at primary and secondary schools. Defective colour vision is inherited by a sex-linked genetic mechanism, and our findings in Belfast are numerically similar to those of other parts of the world where the incidence has been calculated. Our testing is confined to the older children, mainly in Group IV, and we use the Ishihara method to detect the colour-blind.

Tuberculin Tests and B.C.G. Vaccinations

Table E10 shows the results of tuberculin tests of schoolchildren at routine medical inspections. These tests are done by the Heaf multiple-puncture method, and the table is confined to those children

not previously vaccinated with B.C.G. so that the last column gives an estimate of the rate of naturally acquired positive reactions. The fall in the percentage of positive reactors noted for many years continues, but this year's drop has been very small—12.5% positive compared with 12.9% in 1959.

Once again we note that the big rise in the number of reactors begins at about 11 years of age, so that our policy of vaccinating children in Group III still appears to be correct.

During 1960 we retested 218 children vaccinated during the previous seven years; four of these had reverted to negative reaction.

B.C.G. vaccination was given to 3,877 schoolchildren by our doctors and to 1,340 other Belfast residents of all ages by various other authorities who now make their returns to us since the winding up of the Northern Ireland Tuberculosis Authority in April, 1959 (Table E20).

History of Infectious Diseases

Before the routine medical inspection parents are asked to complete a questionnaire to assist the examining doctor and nurse. This includes a list of infectious diseases and the parent is asked to indicate which of these the child has had. Table E12 shows the parents' response to these questions, and gives some indication of the incidence of the common infectious diseases in the child population. The accuracy of information gained in this way is difficult to assess, but perhaps we can regard these as minimal figures on the assumption that parents are more likely to have forgotten a disease which their child has had than to invent one that he has not. Although we make every effort to collect questionnaires from all parents, a few invariably are not completed, and a few children have no parents to answer the questions; these losses also tend to minimise the incidence shown for each disease. The percentages are calculated from nearly 17,000 replies.

As expected the incidence is shown to be higher in the secondary schools, the older children having been longer exposed to infection. It is also interesting to note that girls are given an incidence several per cent higher than boys almost throughout the table. This is reminiscent of the consistently higher numbers of parents who attend medical inspections of their daughters (Table E4) and may reflect a greater solicitude for girls on the parents' part, rather than a higher incidence of infection in the female.

The present regulations on infectious diseases clearly have the intention of protecting pupils from infection by their colleagues; cases of infection are excluded from school for stated periods and in some diseases their home contacts are quarantined. I think it is time to revise our ideas on this topic in the direction of much less exclusion and quarantining for the less dangerous of these diseases. It seems that an attack of all the common infectious diseases is the lot of most people sooner or later, and they might well elect to have it at the most convenient time, that is in early school-days. By this age most of the dangers of the common infections are past and important events like examinations and interviews have not begun. Dangerous diseases like diphtheria, smallpox and poliomyelitis must obviously be treated with respect, but I would like to see no exclusion from school of the cases, much less the contacts, in measles, rubella, chicken pox, whooping cough and possibly others; the criterion for resuming school after an attack should be the child's physical fitness without regard to possible infectivity. The fact that at least 80% of parents tell us that their children have had measles shows that some of our regulations are not effective; I think also that some are not necessary.

Handicapped Pupils

Table E15 shows the numbers of handicaps according to the definitions in Handicapped Pupils and Special Schools Regulations (N.I.) 1959 and the types of schools which deal with them. The totals at the foot of the table show the number of pupils attending each type of school at the end of 1960, and the totals immediately above show the numbers of handicaps shared by these pupils. Compared with the previous year we have an increase of 403 handicapped pupils, mainly caused by improved ascertainment of the educationally subnormal and maladjusted with smaller increases in most of the other categories. It should be explained that many of the pupils in the educationally subnormal category are not very severely handicapped, will improve with the remedial teaching now available to them, and may be expected to make a successful career on leaving school. In all categories the handicaps vary in severity and permanence.

Multiple handicaps continue to be a problem, and it is often hard to find a place for children with more than one affliction, since most schools tend to specialise in dealing with single problems. Serious maladjustment added to any handicap is particularly difficult to deal with, and these unfortunates are not really welcome anywhere. The numbers of children having one of the ten educational handicaps is shown in Table E16; the following Tables E17 and E18 show the numbers of

children with two, three and four handicaps each of which if it existed alone would bring the child within the scope of the regulations for handicapped pupils.

The various special schools have continued to work successfully in 1960, and in Table E19 are set out the numbers of children admitted and discharged from Graymount Open Air School with particulars of the disabilities causing admission during the year. This school mainly caters for delicate pupils, but has a number of physically handicapped and other categories, and it has its share of multiple handicaps. A special class within the school deals with those who have serious educational subnormality in addition to their physical handicap. Rebuilding of this school has not yet commenced, but a much improved modern version is promised soon.

The three county special schools for the educationally subnormal are now organised as a junior, Harberton, and two senior schools, Mount Vernon and Oakleigh. This arrangement appears to work well and the junior school had a larger enrolment this year. These three schools and the two voluntary schools, Immaculata at Whiteabbey and St. Aloysius', all have a number of our pupils with handicaps additional to their educational subnormality.

At Fleming Fulton School another class was opened in 1960 bringing the roll to 68, and we now admit all types of physical handicap to this school which originally dealt only with spastics. Plans for rebuilding the school are well advanced, and the residential block was about half finished by the end of the year.

In September the first of several proposed special classes for partially deaf pupils in normal schools was opened; this is situated in Harding Memorial Primary School. A classroom has been acoustically treated as to ceiling, floor, walls and door, and the floor of the classroom above similarly treated. Ten desks are arranged in a semi-circle facing the blackboard and the teacher's desk, and a group hearing-aid with individual microphones and earphones for each child connects pupils and teacher. The room is also fitted with an induction loop by which the teacher can address the children through their individual hearing-aids which have been modified to receive sounds by induction as well as through the microphone. Part of each day is spent using the group aid and part using the individual aids. Other equipment includes a transistorised speech-trainer, a tape-recorder and a record player; the output from the recorder and player can be fed into the group hearing-aid. The common hall is also wired with an induction loop so that the children can hear what is taking place from any point in the hall.

The class started with six pupils in charge of a teacher-of-the-deaf, and is to be enlarged to ten pupils in 1961. They spend as much time as possible in other classrooms associating with normally hearing children for communal activities and subjects such as art and domestic work. Subjects like English which are mainly verbal are taken in the special classroom.

This class is not in competition with the Ulster School for the Deaf which has educated Belfast's deaf children since the early 1800's. All totally deaf children and the severely partially deaf still require education in a special school. We are dealing here with the problem of children whose lesser degree of hearing loss is insufficient to warrant sending them to a special school but who are failing to progress satisfactorily in the normal school. This class has made a good start and the children have settled happily and confidently into their new surroundings and have been readily accepted by the rest of the school.

Clinics

The first of our new clinics, situated at Cupar Street, was completed but for a few details by the end of the year and much of the equipment and furniture had been installed so that the clinic could commence work on the first day of 1961. The design and workmanship of this building are of the highest order and the staff who will use it are keen to give comparable service to the children of West Belfast.

The second new clinic to be built at Lincoln Avenue will be of a similar design and it is hoped that work on it will start in 1961.

A. L. WALBY, M.B., D.P.H.,

Senior Medical Officer,

School Health Division

Belfast Grant-Aided Schools

TABLE E 1

Type of School							Number	Pupils
Nursery Schools and Classes							11	374
Primary†	{ County Primary Schools						71	29,101
	{ Voluntary Primary Schools under Lay Manager						—	—
	{ Voluntary Primary Schools under Roman Catholic Management						62	19,490
	{ Special Schools						9	918
Secondary†	{ County Secondary Schools						19	14,082
	{ Voluntary Secondary Schools †(Participating)						20	14,376
	{ Voluntary Secondary Schools †(Non-participating)††						3	2,165

† These groups of schools are considered separately where possible in the following tables.

†† These schools conduct their own schemes of medical and dental inspection and treatment under the provisions of Section 42 (6) of the Education (Amendment) Act (N.I.), 1956.

† Includes preparatory school in most cases.

School Medical Inspections

TABLE E 2

Type of School	Sex	Routines							Specials	Re-examinations	Totals
		Age Groups						Totals			
		Nursery	Entrants	II	III	IV	V				
Primary Schools	Boys	206	3,663	1,034	2,636	601	14	7,948	182	4,261	12,597
	Girls	124	2,874	793	2,184	396	10	6,257	140	3,672	10,193
Secondary Schools	Boys	—	55	47	408	1,477	2	1,989	70	1,532	3,591
	Girls	—	127	95	363	1,466	2	2,053	45	1,368	3,466
Totals	Both	330	6,719	1,969	5,591	3,940	28	18,247	437	10,833	29,847

Average Heights and Weights

TABLE E 3

Boys						
Age	Number examined		Average weight pounds		Average height inches	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
4	563	14	40.6	46.5	41.7	44.3
5	2,003	29	42.6	48.0	43.2	44.8
6	1,097	12	44.9	52.8	45.2	47.1
7	153	1	49.7	60.0	46.7	50.5
8	75	2	58.5	59.0	50.6	52.0
9	806	44	65.7	70.6	52.6	54.0
10	1,554	70	69.2	81.5	53.8	55.5
11	598	12	73.6	74.8	55.1	55.6
12	484	326	84.6	96.4	57.4	59.8
13	268	951	89.5	101.7	58.8	61.2
14	265	506	99.4	107.9	61.6	62.7
15	68	20	108.5	119.9	63.5	65.9
16	14	2	117.1	142.0	64.8	66.8
17	—	—	—	—	—	—
18	—	—	—	—	—	—
19	—	—	—	—	—	—

Girls						
Age	Number examined		Average weight pounds		Average height inches	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
4	412	11	38.8	37.5	41.3	43.9
5	1,610	86	41.3	43.8	42.7	44.1
6	852	30	44.2	47.8	44.6	45.2
7	88	4	54.5	60.3	46.0	48.3
8	44	15	57.2	65.1	50.1	53.0
9	661	76	65.1	70.9	52.2	53.6
10	1,310	95	68.4	75.5	53.6	55.1
11	416	36	75.2	87.7	55.4	57.9
12	458	232	88.5	96.3	58.2	60.0
13	280	509	95.3	107.1	59.7	61.2
14	96	910	101.2	108.3	60.6	61.6
15	20	47	121.3	113.8	62.3	61.8
16	10	2	123.2	121.0	62.9	62.3
17	—	—	—	—	—	—
18	—	—	—	—	—	—
19	—	—	—	—	—	—

Attendance of Parents at Routine Medical Inspections

TABLE E 4

Age Group	Primary		Secondary	
	Boys	Girls	Boys	Girls
Entrants	2,621 (71.4%)	2,072 (71.8%)	28 (51.9%)	58 (46.4%)
II	418 (41.4%)	419 (54.1%)	7 (14.6%)	23 (24.2%)
III	780 (29.6%)	896 (42.5%)	24 (6.3%)	52 (14.4%)
IV	55 (9.0%)	92 (19.6%)	68 (4.5%)	178 (12.2%)
V	—	1 (5.9%)	—	1 (10.0%)
Totals	3,874 (48.7%)	3,480 (55.6%)	127 (6.4%)	312 (15.2%)
	7,354 (51.8%)		439 (10.9%)	
	7,793 (42.7%)			

Vaccination

TABLE E 5

Type of School	Sex	Entrants		II		III		IV		V		Totals	
		No. examined	Number unsatisfactory	No. examined	Number unsatisfactory	No. examined	Number unsatisfactory	No. examined	Number unsatisfactory	No. examined	Number unsatisfactory	No. examined	Number unsatisfactory
Primary	Boys	3,671	1,269 (34.6%)	1,009	227 (22.5%)	2,639	670 (25.4%)	611	190 (31.1%)	18	5 (27.8%)	7,948	2,361 (29.7%)
	Girls	2,887	968 (33.5%)	744	187 (24.2%)	2,109	480 (22.8%)	470	140 (29.8%)	17	4 (23.5%)	6,257	1,779 (28.4%)
	Both	6,558	2,237 (34.1%)	1,783	414 (23.2%)	4,748	1,150 (24.2%)	1,081	330 (30.5%)	35	9 (25.7%)	14,205	4,140 (29.1%)
Secondary	Boys	54	12 (22.2%)	48	5 (10.4%)	381	85 (22.3%)	1,502	333 (22.2%)	4	—	1,989	435 (21.9%)
	Girls	125	38 (30.4%)	95	20 (21.1%)	361	71 (19.7%)	1,462	280 (19.2%)	10	2 (20.0%)	2,053	411 (20.0%)
	Both	179	50 (27.9%)	143	25 (17.5%)	742	156 (21.0%)	2,964	613 (20.7%)	14	2 (14.3%)	4,042	846 (20.9%)
TOTALS	Both	6,737	2,287 (33.9%)	1,926	439 (22.8%)	5,490	1,306 (23.8%)	4,045	943 (23.3%)	49	11 (22.4%)	18,247	4,986 (27.3%)

Nutrition

TABLE E 6

Age Group	Type of School	NORMAL (A)		SUB-NORMAL (B)		BAD (C)	
		Boys	Girls	Boys	Girls	Boys	Girls
Entrants	Primary	3,328 (90.7%)	2,632 (91.2%)	328 (8.9%)	217 (7.5%)	15 (0.4%)	38 (1.3%)
	Secondary	52 (96.3%)	120 (96.0%)	2 (3.7%)	5 (4.0%)	—	—
II	Primary	934 (92.6%)	714 (92.3%)	74 (7.3%)	59 (7.6%)	1 (0.1%)	1 (0.1%)
	Secondary	47 (97.9%)	86 (90.5%)	1 (2.1%)	9 (9.5%)	—	—
III	Primary	2,468 (93.5%)	1,968 (93.3%)	164 (6.2%)	134 (6.4%)	7 (0.3%)	7 (0.3%)
	Secondary	375 (98.4%)	348 (96.4%)	6 (1.6%)	12 (3.3%)	—	1 (0.3%)
IV	Primary	581 (95.1%)	445 (94.7%)	23 (3.8%)	22 (4.7%)	7 (1.1%)	3 (0.6%)
	Secondary	1,444 (96.1%)	1,431 (97.9%)	57 (3.8%)	30 (2.0%)	1 (0.1%)	1 (0.1%)
V	Primary	16 (88.9%)	17 (100%)	2 (11.1%)	—	—	—
	Secondary	4 (100%)	10 (100%)	—	—	—	—
TOTALS	Primary	7,327 (92.2%)	5,776 (92.3%)	591 (7.4%)	432 (6.9%)	30 (0.4%)	49 (0.8%)
	Secondary	1,922 (96.6%)	1,995 (97.2%)	66 (3.3%)	56 (2.7%)	1 (0.1%)	2 (0.1%)

Defects Discovered at Routine Medical Inspection

TABLE E 7

Defect		Type of school	Defective for treatment	Per 1,000	Defective for observation	Per 1,000
Skin		Primary ..	76	5.4	191	13.4
		Secondary ..	35	8.7	91	22.5
		Total ..	111	6.1	282	15.5
Eyes	(a) vision	Primary ..	1,462	102.9	2,782	195.8
		Secondary ..	461	114.1	742	183.6
		Total ..	1,923	105.4	3,524	193.1
	(b) squint	Primary ..	193	13.6	453	31.9
		Secondary ..	18	4.5	71	17.6
		Total ..	211	11.6	524	28.7
	(c) other	Primary ..	44	3.1	131	9.2
		Secondary ..	6	1.5	19	4.7
		Total ..	50	2.7	150	8.2
	(a) hearing	Primary ..	93	6.5	159	11.2
		Secondary ..	21	5.2	9	2.2
		Total ..	114	6.2	168	9.2
Ears	(b) otitis media	Primary ..	24	1.7	66	4.6
		Secondary ..	5	1.2	10	2.5
		Total ..	29	1.6	76	4.2
	(c) other	Primary ..	22	1.5	45	3.2
		Secondary ..	5	1.2	—	—
		Total ..	27	1.5	45	2.5
Nose and Throat		Primary ..	231	16.3	1,670	117.6
		Secondary ..	25	6.2	121	29.9
		Total ..	256	14.0	1,791	98.2
Speech		Primary ..	64	4.5	226	15.9
		Secondary ..	11	2.7	12	3.0
		Total ..	75	4.1	238	13.0
Cervical glands		Primary ..	17	1.2	144	10.1
		Secondary ..	—	—	13	3.2
		Total ..	17	0.9	157	8.6
Heart and circulation		Primary ..	74	5.2	197	13.9
		Secondary ..	21	5.2	37	9.2
		Total ..	95	5.2	234	12.8
Lungs	(a)	Primary ..	131	9.2	312	22.0
		Secondary ..	11	2.7	54	13.4
		Total ..	142	7.8	366	20.1
	(b) pulmonary tuberculosis	Primary ..	1	0.1	12	0.8
		Secondary ..	—	—	4	1.0
		Total ..	1	0.1	16	0.9
	Development	Primary ..	9	0.6	57	4.0
		Secondary ..	5	1.2	6	1.5
		Total ..	14	0.8	63	3.5
Orthopaedic	(a) posture	Primary ..	64	4.5	37	2.6
		Secondary ..	29	7.2	16	4.0
		Total ..	93	5.1	53	2.9
	(b) feet	Primary ..	168	11.8	180	12.7
		Secondary ..	98	24.2	86	21.3
		Total ..	266	14.6	266	14.6
	(c) other	Primary ..	28	2.0	76	5.4
		Secondary ..	7	1.7	30	7.4
		Total ..	35	1.9	106	5.8

TABLE E 7 (continued)

Defect	Type of school	Defective for treatment	Per 1,000	Defective for observation	Per 1,000
Nervous system	Primary ..	3	0.2	53	3.7
	(a) epilepsy	Secondary ..	0.2	6	1.5
		Total ..	0.2	59	3.2
	(b) other	Primary ..	0.4	31	2.2
		Secondary ..	—	3	0.7
		Total ..	0.3	34	1.9
Psychological	Primary ..	34	2.4	558	39.3
	(a) development	Secondary ..	—	11	2.7
		Total ..	1.9	569	31.2
	(b) stability	Primary ..	1.1	29	2.0
		Secondary ..	0.2	6	1.5
		Total ..	0.9	35	1.9
Tuberculosis—non-pulmonary	Primary ..	—	—	4	0.3
	Secondary ..	—	—	3	0.7
	Total ..	—	—	7	0.4
Other defects	Primary ..	165	11.6	336	23.7
	Secondary ..	26	6.4	71	17.6
	Total ..	191	10.5	407	22.3

The numbers of children examined were:—Primary 14,205; Secondary 4,042; Total 18,247.

The visual acuity could not be accurately assessed in 306 primary schoolchildren; for “Eyes (a) vision”, therefore, the numbers examined were:—Primary 13,899; Secondary 4,042; Total 17,941.

Visual Acuity

TABLE E 8

(a) Primary schoolchildren without glasses

	Left eye										Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals	
Right eye	6/6	10079	474	116	42	37	46	19	12	10825	
	6/9	352	945	129	59	30	15	7	4	1541	
	6/12	91	119	216	68	28	12	9	1	544	
	6/18	72	53	86	166	36	18	7	—	438	
	6/24	35	20	16	41	82	15	3	1	213	
	6/36	39	18	17	14	25	65	5	—	183	
Left eye	6/60	17	8	5	4	4	9	32	4	83	
	<6/60	8	—		4	3	7	—	50	72	
	Totals	10693	1637	585	398	245	187	82	72	13899	

(b) Primary schoolchildren with glasses

	Left eye										Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals	
Right eye	6/6	377	66	37	23	17	8	3	4	535	
	6/9	55	108	39	13	9	5	2	1	232	
	6/12	29	36	69	20	5	—	1	1	161	
	6/18	14	14	13	14	2	2	1	2	62	
	6/24	13	8	4	1	5	3	—	—	34	
	6/36	6	4	—	5	—	1	—	—	16	
Left eye	6/60	4	2	1	—	1	—	2	1	11	
	<6/60	3	2	1	—	1	—	—	6	13	
	Totals	501	240	164	76	40	19	9	15	1064	

TABLE E 8 (continued)

(c) Secondary schoolchildren without glasses

	Left eye									Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals
Right eye	6/6	2866	132	28	34	16	15	10	2	3103
	6/9	114	125	33	16	2	3	1	—	294
	6/12	27	28	52	15	6	6	2	—	136
	6/18	22	12	36	46	21	8	5	—	150
	6/24	17	7	12	23	42	8	5	—	114
	6/36	11	9	6	8	16	78	10	3	141
	6/60	5	3	1	—	5	18	38	6	76
	<6/60	4	2	—	1	—	3	2	16	28
Left eye	Totals	3066	318	168	143	108	139	73	27	4042

(d) Secondary schoolchildren with glasses

	Left eye										Right eye
	Visual acuity	6 /6	6 /9	6 /12	6 /18	6 /24	6 /36	6 /60	< 6 /60	Totals	
Right eye	6 /6	202	37	21	12	5	4	—	—	281	
	6 /9	56	63	12	7	1	1	1	—	141	
	6 /12	11	16	21	4	3	—	—	—	55	
	6 /18	9	7	5	13	—	2	—	—	36	
	6 /24	1	—	4	—	3	—	—	—	8	
	6 /36	2	1	1	—	1	2	—	—	7	
	6 /60	4	1	—	1	—	—	—	—	6	
	< 6 /60	1	3	—	—	—	—	—	—	4	
Left eye	Totals	286	128	64	37	13	9	1	—	538	

Colour Vision

TABLE E 9

Colour Vision	Type of school	Boys	Girls	Total
Normal	Primary	619 (89.8%)	461 (94.5%)	1,080 (91.8%)
Defective—safe		46 (6.7%)	25 (5.1%)	71 (6.0%)
Defective—unsafe		24 (3.5%)	2 (0.4%)	26 (2.2%)
Total		689 (100%)	488 (100%)	1,177 (100%)
Normal	Secondary	1,484 (90.8%)	1,449 (97.4%)	2,933 (93.9%)
Defective—safe		70 (4.3%)	33 (2.2%)	103 (3.3%)
Defective—unsafe		81 (4.9%)	6 (0.4%)	87 (2.8%)
Total		1,635 (100%)	1,488 (100%)	3,123 (100%)
Normal	All Schools	2,103 (90.5%)	1,910 (96.7%)	4,013 (93.3%)
Defective—safe		116 (5.0%)	58 (2.9%)	174 (4.1%)
Defective—unsafe		105 (4.5%)	8 (0.4%)	113 (2.6%)
Total		2,324 (100%)	1,976 (100%)	4,300 (100%)

Tuberculin Tests

TABLE E 10

Age	Number of children available	Offered* tuberculin test	Refused	Tested	Negative	Positive
4	1,000	2	— —	2	2 (100%)	— —
5	3,728	—	— —	—	— —	— —
6	1,991	5	1 (20.0%)	4	3 (75.0%)	1 (25.0%)
7	246	4	— —	4	4 (100%)	— —
8	136	37	8 (21.6%)	29	27 (92.1%)	2 (6.9%)
9	1,587	948	173 (18.2%)	775	738 (95.2%)	37 (4.8%)
10	3,029	1,902	302 (15.9%)	1,600	1,479 (92.4%)	121 (7.6%)
11	1,062	549	112 (20.4%)	437	392 (89.7%)	45 (10.3%)
12	1,500	418	101 (24.2%)	317	251 (79.2%)	66 (20.8%)
13	2,008	617	174 (28.2%)	443	342 (77.2%)	101 (22.8%)
14	1,777	464	97 (20.9%)	367	249 (67.8%)	118 (32.2%)
15	155	33	6 (18.2%)	27	20 (74.1%)	7 (25.9%)
16	28	9	5 (55.6%)	4	1 (25.0%)	3 (75.0%)
17	—	—	— —	—	— —	— —
18	—	—	— —	—	— —	— —
19	—	—	— —	—	— —	— —
Totals	18,247	4,988	979 (19.6%)	4,009	3,508 (87.5%)	501 (12.5%)

* From 10 years onwards the difference between this figure and the number available is accounted for largely by children known to have had B.C.G. vaccination, but includes some who had skin disease or other ailments making tuberculin testing undesirable. At routine medical inspections the younger children are not usually offered tuberculin test unless they are tuberculosis contacts, or their parents request it, or they are nearing 10 years of age.

Action to be Taken as a Result of Routine Medical Inspection

TABLE E 11

Primary Schools

Age Group	Home visits		To Family Doctor		To School Clinic		To Eye Specialist		To E.N.T. Specialist		To Hospital		To Physio-therapist		To Speech Therapist		To Audio-metrist		Other action	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	110	68	51	34	193	126	259	188	2	—	19	16	52	24	12	15	14	12	16	12
II	40	23	7	7	66	41	133	101	4	3	8	6	22	14	15	1	5	4	7	4
III	175	111	23	21	190	131	392	308	14	5	19	10	71	48	11	7	20	7	36	27
IV	59	40	1	4	50	44	122	105	4	2	2	7	15	17	5	2	3	2	15	6
V	2	1	—	—	3	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—
Totals	386	243	82	66	502	342	906	708	24	10	48	39	160	103	43	25	42	25	74	49
	629		148		844		1,614		34		87		263		68		67		123	

Secondary Schools

Age Group	Home visits		To Family Doctor		To School Clinic		To Eye Specialist		To E.N.T. Specialist		To Hospital		To Physio-therapist		To Speech Therapist		To Audio-metrist		Other action	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	—	2	1	6	1	3	1	3	—	—	—	—	3	1	1	—	1	—	—	2
II	1	—	—	3	2	2	4	10	—	—	—	—	1	5	1	—	—	—	1	—
III	7	5	3	7	6	4	36	39	—	—	1	4	24	9	—	2	—	—	2	3
IV	55	64	16	10	83	69	182	198	4	4	10	11	41	62	5	1	6	5	9	5
V	2	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Totals	65	71	20	26	92	78	223	252	4	4	11	15	69	77	7	3	9	5	12	10
	136		46		170		475		8		26		146		10		14		22	

TABLE E 12History of Infectious Diseases

Disease	History of past infection given at routine Medical Inspection								
	Primary			Secondary			Total		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Measles	78.6%	80.3%	79.4%	81.4%	86.6%	84.0%	79.2%	81.9%	80.4%
German Measles ..	14.1%	15.8%	14.9%	21.0%	22.6%	21.8%	15.5%	17.5%	16.4%
Chicken-Pox	44.7%	46.6%	45.5%	60.9%	65.1%	63.0	48.0%	51.1%	49.4%
Scarlet Fever.. ..	6.7%	7.7%	7.1%	11.5%	11.5%	11.5%	7.6%	8.6%	8.1%
Diphtheria	0.3%	0.3%	0.3%	0.2%	0.4%	0.3%	0.2%	0.3%	0.3%
Mumps	31.1%	31.0%	31.1%	47.1%	46.8%	46.9%	34.3%	34.9%	34.6%
Whooping Cough ..	44.9%	48.9%	46.6%	51.0%	54.3%	52.6%	46.1%	50.2%	48.0%
Chorea	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Rheumatic Fever ..	0.2%	0.4%	0.3%	0.6%	0.6%	0.6%	0.3%	0.4%	0.4%

TABLE E 13Re-examinations

Defects for which re-examined	Primary Schools			Secondary Schools			Primary and Secondary Schools		
	For Treatment	For observation	Cured	For Treatment	For Observation	Cured	For treatment	For Observation	Cured
Skin	24	90	45	3	25	26	27	115	71
Eyes (a) vision	1,256	2,029	642	462	1,463	186	1,718	3,492	828
(b) squint	84	348	15	7	68	6	91	416	21
(c) other	2	27	14	—	7	3	2	34	17
Ears (a) hearing	119	135	148	7	23	21	126	158	169
(b) otitis media	8	18	37	3	3	10	11	21	47
(c) other	9	16	35	1	8	7	10	24	42
Nose and throat	209	738	805	11	133	162	220	871	967
Speech	76	189	107	15	30	25	91	219	132
Cervical glands	7	46	19	—	2	8	7	48	27
Heart and circulation	28	101	90	4	31	21	32	132	111
Lungs (a)	73	187	206	6	67	41	79	254	247
(b) pulmonary tuberculosis	—	7	10	—	4	3	—	11	13
Development	13	47	20	6	16	13	19	63	33
Orthopaedic (a) posture	2	23	41	7	13	20	9	36	61
(b) feet	35	119	127	13	83	93	48	202	220
(c) other	8	41	23	—	13	25	8	54	48
Nervous system (a) epilepsy	1	14	—	1	2	2	2	16	2
(b) other	3	10	8	—	1	—	3	11	8
Psychological (a) development	21	91	14	—	14	7	21	105	21
(b) stability	7	20	13	—	2	1	7	22	14
Tuberculosis—non-pulmonary	—	3	3	—	3	1	—	6	4
Other defects	101	265	330	13	83	108	114	348	438
Totals	2,086	4,564	2,752	559	2,094	789	2,645	6,658	3,541
	9,402			3,442			*12,844		

*12,844 defects in 10,833 children (primary 7,933 and secondary 2,900)

Clinic Examinations

TABLE E 14

Reason for examination						Number of examinations carried out	Per cent
Skin	..	..	..	..	..	1,365	7.6
Eyes	(a) vision	..	..	..	..	647	3.6
	(b) squint	..	..	..	..	101	0.6
	(c) other	..	..	..	..	144	0.8
Ears	(a) hearing	..	..	..	..	540	3.0
	(b) otitis media	..	..	..	..	116	0.7
	(c) other	..	..	..	..	102	0.6
Nose and throat	..	..	..	..	..	531	3.0
Speech	..	..	..	..	..	146	0.8
Cervical glands	..	..	..	..	..	13	0.1
Heart and circulation	..	..	..	..	..	197	1.1
Lungs	(a)	..	..	..	..	387	2.2
	(b) pulmonary tuberculosis	..	..	..	..	4	0.02
Development	..	..	..	..	..	24	0.1
Orthopaedic	(a) posture	..	..	..	..	9	0.05
	(b) feet	..	..	..	..	75	0.4
	(c) other	..	..	..	..	83	0.5
Nervous system	(a) epilepsy	..	..	..	..	38	0.2
	(b) other	..	..	..	..	39	0.2
Psychological	(a) development	..	..	..	..	661	3.7
	(b) stability	..	..	..	..	145	0.8
Tuberculosis non-pulmonary	..	..	..	..	..	2	0.01
Other defects	..	..	..	..	..	1,089	6.1
B.C.G. vaccination	..	..	..	..	..	3,737	20.9
Tuberculin skin test	..	..	..	..	..	2,836	15.9
Pre-anaesthetic examination	..	..	..	..	..	4,809	27.0
Total						17,840	100

TABLE E 15

Handicapped Pupils

Handicap	At special day school	At special residential school	At normal school	At no school	At home tuition	Totals
	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls
Blind	4 7	3 5	— —	4 2	1 —	12 14
Partially sighted ..	9 10	6 2	34 31	1 1	1 1	51 45
Deaf	10 13	4 2	— —	2 —	— —	16 15
Partially deaf ..	28 23	5 5	129 92	3 2	— 1	165 123
Delicate	68 82	2 1	58 50	2 —	8 9	138 142
Educationally subnormal	345 228	14 9	893 603	14 14	8 3	1,274 857
Epileptic	20 14	2 3	71 55	4 4	2 2	99 78
Maladjusted ..	33 18	1 4	123 49	1 —	1 1	159 72
Physically handicapped	60 61	15 7	106 98	7 6	21 14	209 186
Speech defect ..	48 22	— 1	331 307	3 1	2 —	384 331
Total handicaps ..	325 478	52 39	1,745 1,285	41 30	44 31	2,507 1,863
	1,103	91	3,030	71	75	*4,370
Total pupils ..	947	77	2,585	60	56	3,725

*4,370 handicaps in 3,725 pupils (2,123 boys, 1,602 girls). Of these, 470 children have 2 handicaps, 74 have 3 handicaps, and 9 have 4 handicaps.

TABLE E 16

Single Handicaps

Number of children affected	Handicap
21	Blind
72	Partially sighted
28	Deaf
200	Partially deaf
198	Delicate
1,649	Educationally sub-normal
104	Epileptic
73	Maladjusted
284	Physically handicapped
543	Speech defect
3,172	Total

Dual Handicaps

TABLE E 17

Handicap	Blind	Partially sighted	Deaf	Partially deaf	Delicate	E.S.N.	Epileptic	Maladjusted	Physically handicapped	Speech defect
Speech defect ..	—	—	—	7	2	94	1	4	41	122
Physically handicapped ..	1	4	2	2	5	44	3	2	77	
Maladjusted ..	—	—	—	—	5	115	—	126		
Epileptic ..	1	—	1	—	1	44	51			
E.S.N. ..	1	9	—	56	45	408				
Delicate ..	—	—	—	6	64					
Partially deaf ..	1	—	—	72						
Deaf ..	—	—	3							
Partially sighted ..	—	13								
Blind ..	4									

Showing the distribution of 940 handicaps among the 470 children who have two handicaps.

Multiple Handicaps

TABLE E 18

Number of children affected	Categories of handicaps coinciding			
	First	Second	Third	
1	Blind	E.S.N.	Speech defect	
1	P. sighted	P. deaf	E.S.N.	
2	P. sighted	Delicate	E.S.N.	
1	P. sighted	E.S.N.	Maladjusted	
2	P. sighted	E.S.N.	P. handicapped	
1	P. sighted	P. handicapped	Speech defect	
3	P. deaf	Delicate	E.S.N.	
3	P. deaf	E.S.N.	Maladjusted	
1	P. deaf	E.S.N.	P. handicapped	
7	P. deaf	Maladjusted	Speech defect	
3	Delicate	E.S.N.	Epileptic	
3	Delicate	E.S.N.	Maladjusted	
5	Delicate	E.S.N.	Speech defect	
1	Delicate	Epileptic	Speech defect	
2	E.S.N.	Epileptic	Maladjusted	
5	E.S.N.	Epileptic	P. handicapped	
3	E.S.N.	Epileptic	Speech defect	
2	E.S.N.	Maladjusted	P. handicapped	
13	E.S.N.	Maladjusted	Speech defect	
15	E.S.N.	P. handicapped	Speech defect	
74	Total with triple handicaps			
	First	Second	Third	Fourth
4	P. sighted	E.S.N.	Epileptic	P. handicapped
1	P. deaf	E.S.N.	Maladjusted	P. handicapped
1	Delicate	E.S.N.	Epileptic	Speech defect
3	E.S.N.	Epileptic	P. handicapped	Speech defect
9	Total with quadruple handicaps			

TABLE E 19

Graymount Open-Air School

Reasons for admission	Boys	Girls	Total
Asthma	—	2	2
Bronchiectasis	10	6	16
Bronchitis	2	1	3
Cerebral palsy	—	1	1
Coeliac disease	—	1	1
Collapse of lung	1	1	2
Debility	7	14	21
Epilepsy	2	—	2
Heart disease (congenital)	5	2	7
Heart disease (rheumatic)	—	1	1
Late effects of primary tuberculous complex	1	—	1
Lobectomy	2	2	4
Maladjustment	1	—	1
Nervousness	1	1	2
Orthopaedic	—	1	1
Rheumatism	2	3	5
Number admitted during 1960	34	36	70
Number discharged during 1960	30	40	70
Average duration of stay in months	25	31	28

TABLE E 20

Miscellaneous

Ultra-violet Light Treatments	2,570	
Physiotherapy:		
Children treated	993	
Total attendances	11,616	
Cases discharged	267	
Waiting list	32	
Speech Therapy:		
Total attendances (excluding special schools)	1,672	
Audiometry:		
Children sweep tested at school	5,296	
Children failing sweep test	466	(8.8%)
Children failing individual test	336	(6.3%)
Other children individually tested	250	
Children referred to specialist	93	
Cleanliness:		
Children inspected	153,260	
Children found to have nits	6,993	(4.5%)
Children found to have vermin	1,791	(1.2%)
Children cleansed at clinics	3,505	
B.C.G. Vaccinations:		
Vaccinations at School Clinics	3,877	
Vaccinations by other authorities	1,340	
Children tuberculin tested at school	4,009	
Children showing positive reaction	501	(12.5%)
Children showing negative reaction	3,508	(87.5%)
Vaccinated children retested—positive	218	
Vaccinated children retested—negative	4	
Nurses' Home Visits	6,650	
Nurses' School Visits (other than routine inspections)	1,375	
Medical Officers' Visits	323	
Eye Specialist:		
Children refracted	4,393	
Children given post-mydriatic examination	2,547	
Children examined for other eye conditions	557	
Children referred for orthoptic treatment	106	
Medical Specialist:		
Children examined at school clinics	181	
Children examined at special schools	93	
General Anaesthetics	4,809	

REPORT OF THE CHIEF DENTAL OFFICER FOR THE YEAR 1960

In presenting my first annual Report for the Dental Section, School Health Service, it is appropriate that my remarks should be prefaced with a brief reference to my predecessor, Mr. Irving. In his Annual Report for 1959, Mr. Irving traced the growth of the School Dental Service in Belfast from 1927 to the present day and showed the path of progress from those early days of unenlightened thought in regard to Dentistry to have been a prolonged uphill struggle, with many heart-breaks.

The School Dental Service in Belfast, as it stands today, providing as it does Dental Treatment of a very high standard, limited only in scope and extent by the absence of proper amenities and coupled with the opening of the first clinic in a programme of new clinics at Cupar Street, is in itself a tribute to the part Mr. Irving has played in the creation of the School Dental Service in Belfast. It is regretted that in the latter years prior to his retirement, failing health was to prevent him taking a more active part in his department; however, with the opportunity now afforded to him for relaxation, the dental staff would wish to be associated with me in extending to Mr. Irving best wishes for better health and many happy years of retirement.

Dental Inspection

Once again the Department has found it possible to provide dental inspection for all age groups in all City Schools participating in the Authority's School Health Scheme. The number of children inspected per School roll total shows an increase of almost 3% over the 1959 total. A decrease in the number of children requiring treatment from 71.6% to 69.57% is a very welcome feature, in view of the fact that 32.3% of the children requiring dental treatment, do not apparently receive any treatment or only do so when necessity compels.

It would appear, therefore, that a concentrated effort in dental health education is an urgent requirement, especially for parents and children in the category mentioned. The task of bringing enlightenment to these parents and children should not be underestimated and it may prove to be a long term project.

The downward trend in the number of parents opting for their children to receive treatment at the Authority's Clinics continues, with a steady annual reduction in the region of 4%. What is the reason for this continued reduced demand for the School Dental Service? It is my opinion, rightly or wrongly, that if there is one single factor above any other, it is the policy of four large clinics to serve the whole of Belfast. It is generally accepted that the ideal arrangement in a School Dental Service is to bring the service to the schools; where this is not practicable, one should aim at the nearest approach to this ideal.

In Belfast the converse is in operation, in that the children must find their way to the clinics as best they can and very often this involves the child in having to make many visits over considerable distances on his own, in addition to having to cross busy thoroughfares. Parents are reluctant to expose their children to these hazards and, as a result, seek treatment nearer home. A reappraisal of our clinic policy is therefore, in my view, urgently required before entering into further commitments.

Treatments

Treatment has followed the pattern of previous years, with an emphasis placed on conservation. Nevertheless, the present ratio of 2.3 to 2.6 fillings to every extraction—a ratio which has remained fairly constant over the past four years—can scarcely be regarded with any degree of satisfaction. An even greater effort would appear to be required in conservation of the deciduous teeth, which, in turn, should curtail the necessity for orthodontic treatment.

In the sphere of X-rays and prosthetics, steps have already been taken in regard to the provision of facilities at each clinic for these services. This should result in less inconvenience to patients in having to be referred elsewhere, a greater appreciation by parents of the service provided, and the creation of a wider field of interest for the Authority's Dental Officers. It is additionally anticipated that a beginning will be made in the provision of dental services for both the pre-school child and the expectant and nursing mother before the expiry of 1961.

On perusal of the dental inspection and treatment tables, it will at once be observed that my preference is for simplicity, while retaining all the relevant details.

In conclusion, might I take this opportunity to express to the members of the dental staff my appreciation of the effort which each and every one has made in fulfilment of my often trying demands on their services. I should also like to record my appreciation of the co-operation which I have experienced from all my medical and other colleagues at Headquarters, as well as from principals and school teachers, which has indeed made my brief period in office more pleasurable than could ever have been expected.

S. R. SHEANE, L.D.S.
Chief Dental Officer

TABLE F 1

	1960	1959
School Dental Inspection		
Number of children on School rolls	80,506	81,251
Participating in Health Authority's scheme	78,341	79,275
Not participating in Health Authority's scheme	2,165	1,976
Total number inspected in Schools	72,847	71,424
Age Group 5—7 years	15,701	15,838
Total number requiring treatment	50,677	51,169
Defective (Percentage)	69.57%	71.6%
Consenting to treatment	34,273	36,073
At Health Authority's clinics	12,244	14,260
By own dentist	22,029	21,813
Appointments issued % of applications	100%	100%
Number of sessions devoted to school inspections	551	560
Clinical inspections	12,462	13,117
Treatments		
<i>Extractions</i>		
Temporary dentition	6,527	7,163
Permanent dentition	2,267	2,368
Total	8,794	9,531
General anaesthetics	4,598	5,284
Local anaesthetics	1,096	386
Total	5,694	5,670
<i>Fillings</i>		
Temporary teeth	5,541	6,016
Permanent teeth	18,122	20,182
Total	23,663	26,198
X Rays	226	212
<i>Special treatments</i>		
Orthodontic	Nil	Nil
Prosthetic	Nil	Nil
Scalings	109	70
Dressings	906	972
Other operations	744	773
Total Treatments	40,348	43,705
Number of Sessions devoted to treatment	4,109	4,353
Total visits made by children to clinics	34,176	36,911
Individuals (first inspection and first treatment)	9,914	10,651
Individuals treated at Authority's clinics	7,425	5,996

TABLE F 2

(extract from Table F1)

	1960
Nursery Schools	
Number of children on School rolls	374
Total number inspected	312
Total number requiring treatment	143
Defective (percentage)	45.83%
Treatment	
Extractions (temporary teeth)	148
Anaesthetics (general)	91
Fillings (temporary teeth)	175
Scalings	1
Dressings	6
Other operations	18
Total treatments	439
Total visits made by children to clinics	365
Individuals (first inspection and first treatment)	117
Individuals treated at Authority's clinics	99

TABLE F 3

(extract from Table F1)

										1960
Special Schools—(Handicapped children)										
Number of children on School rolls										918
Total number inspected										1,587
Total number requiring treatment										1,128
Defective (percentage)										71.08%
Treatment										
<i>Extractions</i>										
Temporary teeth										95
Permanent teeth										109
General anaesthetics										120
Local anaesthetics										1
<i>Fillings</i>										
Temporary Teeth										77
Permanent teeth										871
Scalings										5
Dressings										24
Other operations..										27
Total treatments										1,208
Total visits made by children for treatment										817
Individuals (first inspection and first treatment)										327
Individuals treated at Authority's clinics										286

(These schools are visited twice yearly)

TABLE F 4

										1960
School dental inspection—Non-Participating Schools										
Number of children on School rolls..										2,165
Total number inspected										2,047
Defective (percentage)										59.01%

TABLE F 5

										1960
Staff										
Chief Dental Officer										1
Dental Officers (full time)										9
Dental Officers (sessional)										4
Total (expressed as full time equivalent)										10.64
Anaesthetists										6
Professional staff was fully supported by Dental Attendants acting in both surgical and administrative capacities.										
Clinics (static)										
Area 1										Academy St.
Area 2										Mountcollyer Street
Area 3										Ariel Street
Mobile Clinics										Cherryville Street
										Nil

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